

JAX-9B

WEATHER FACSIMILE RECEIVER

SERVICE MANUAL



RECORD OF REVISION

Rev.	Description	Date
1.0	First edition	29-May.-08

Contents

1.	Maintenance Software.....	1
1.1.	Preparation.....	1
1.2.	Installing the setup software (<i>under development</i>).....	1
1.3.	Installing the Program update software	2
1.4.	Connecting the PC to JAX-9B.....	5
1.5.	Setup software operation (<i>under development</i>)	6
1.6.	Program update software operation	7
1.7.	Confirming a COM port number.....	15
2.	Checking operation	17
2.1.	Operation of Standard configuration.....	17
2.2.	Displaying the receiving FAX images by the PC (Option)	17
3.	Maintenance.....	19
3.1.	Program version of JAX-9B.....	19
3.2.	Position of each circuit board	20
3.3.	Removing the Cover of JAX-9B	21
3.4.	Attaching the Cover of JAX-9B.....	23
3.5.	Replacing the Control board (CKK-535)	24
3.6.	Replacing the Power supply board (7EPNA4001)	26
3.7.	Replacing the Receiver board (CMA-906).....	27
3.8.	Replacing the Thermal head.....	28
3.9.	Replacing the Motor	29
3.10.	Replacing the Gear Assy and Spur Gear	30
3.11.	Control board (CKK-535).....	31
3.12.	Receiver board (CMA-906).....	33
3.13.	Replacing Recording Paper	34
3.14.	Cleaning.....	37
3.15.	Replacing Backup Battery	39
3.16.	Service Parts.....	40
4.	Troubleshooting	41
4.1.	Failure example and countermeasure.....	41
4.2.	Recording test	44
4.3.	Panel test.....	44
4.4.	Initializing the memory	44
5.	Assembly drawing	45

1. Maintenance Software

JAX-9B can be set up by the PC which installed the maintenance software.

The communication interface is a RS-232C.

“Setup Software (under development)” and “Program update software” constitute the Maintenance Software of JAX-9B.

1.1. Preparation

Prepare the following tools, in order to set up JAX-9B or update the programs of JAX-9B by the PC.

- PC (OS: Windows Xp, Windows Vista (on schedule))
- USB / COM Converter (Communication port of JAX-9B is a D-SUB 9(female).)
- Maintenance Software (for setup (under development), for update program)

1.2. Installing the setup software (under development)

The setup software is the same as software for receiving the FAX images.

The effective functions are selected by communication port of JAX-9B.

- COM port (RS-232C): Setup software
- External I/F terminal (RS-422): Software for receiving FAX images

1) Download the “JAX-9B Setup Software” from the Marine Service WEB.

2) Double-click the "setup_CYC-xxx_WFAXview_V100.exe" which is a downloaded file.

3) The setup software is installed automatically
Installed folder: C:\ProgramFiles\JRC\W-FAX

4) The icon of “WFAXview” is put on the desktop.

5) Connect JAX-9B to the PC. (Refer to the 1.4 clause)
Turn on the power of JAX-9B, and double-click the icon of “WFAXview”.
The software for setup starts.

6) The dialog which requires inputting a COM number of the PC for connecting appears.
Enter the COM number to connect to JAX-9B.

* The dialog which requires inputting a port number for connecting appears only at the first activation, and does not appears at the activation of the 2nd henceforth.
Refer to the “Instruction Manual of PC Software” when the COM number of the PC is changed.

* Confirm the COM number by referring to the 1.7 clause when the COM number is not recognized.

7) Communication link test between the PC and JAX-9B is started.
The error message will appear when the result of test is a failure.
Check the wiring between the PC and JAX-9B, and reboot the setup software.

1. Maintenance Software

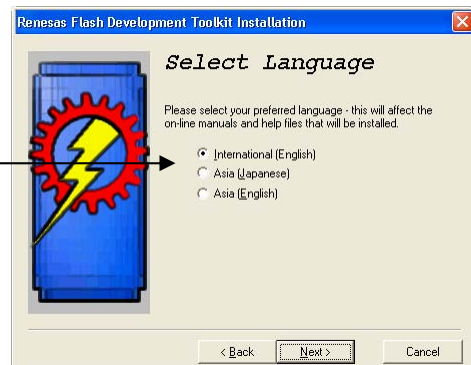
JAX-9B W-FAX Service Manual

1.3. Installing the Program update software

- 1) Download the “JAX-9B Program Update Software” from the Marine Service WEB.
- 2) Double-click the “fdtv30300.exe” which is a downloaded file.
- 3) Installing software is started.
 - Click the [Next] button.



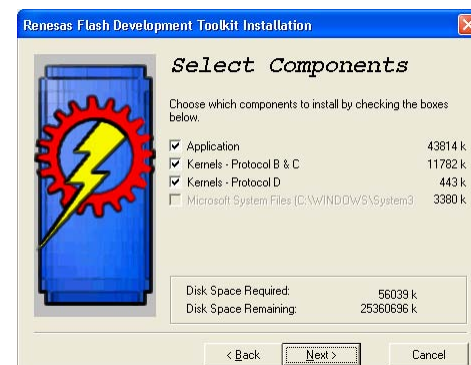
- 4) The window for selecting a language appears.
 - Select the “International (English)”.
 - Click the [Next] button.



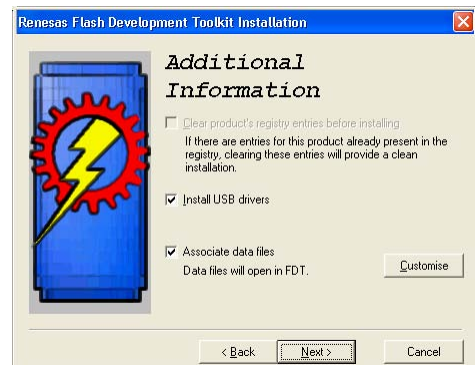
- 5) Advance install by DEFAULT setting henceforth.
 - Click the [Next] button.



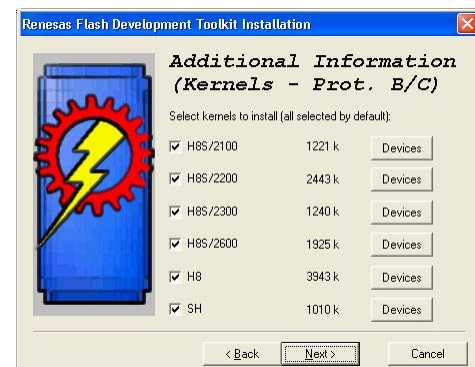
- Click the [Next] button.



- Click the [Next] button.



- Click the [Next] button.



- Click the [Next] button.



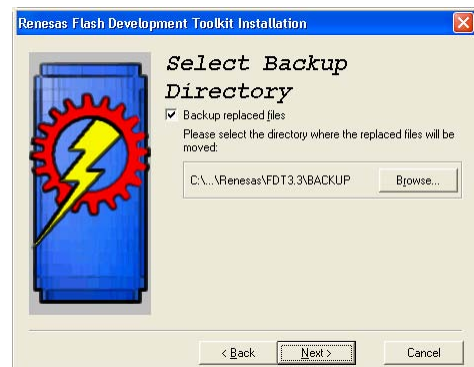
- Click the [Next] button.



1. Maintenance Software

JAX-9B W-FAX Service Manual

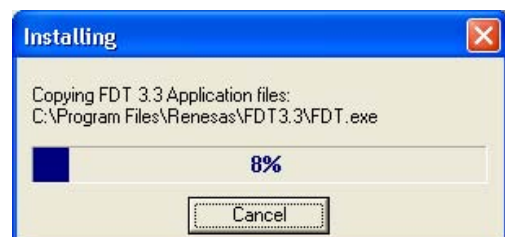
- Click the [Next] button.



- Click the [Next] button.



- Click the [Install] button.



- Click the [Finish] button.

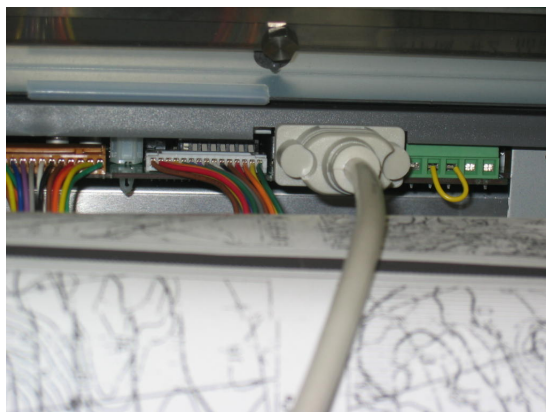
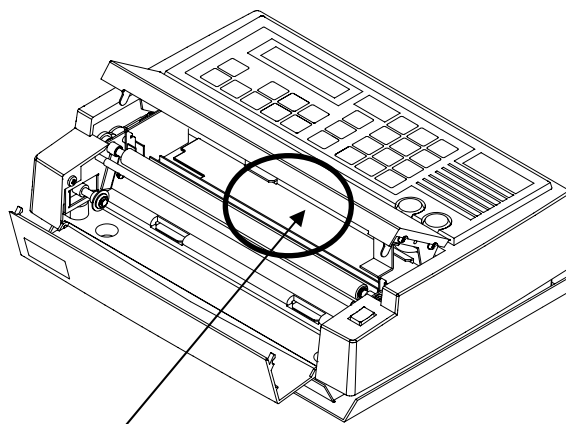
The installing is completed.



1.4. Connecting the PC to JAX-9B

Connect the PC to JAX-9B.

- 1) Open the front cover.
The COM connector for connecting is put on the control board (CKK-535).
- 2) The D-SUB9 female connector appears on a following point.
Connect the COM cable to the D-SUB connector.



1.5. Setup software operation *(under development)*

The following data can be set up to JAX-9B easily by using the Setup Software.

- Frequency channels
- Timer programs

**Wait for release of the Setup Software for a while until it completes,
since it is under development now.**

This manual is also revised at the time of a release.

**Register the Frequency channels and the Timer programs
by using the panel of JAX-9B for a while.**

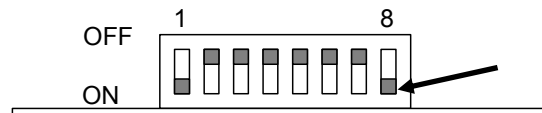
1.6. Program update software operation

1.6.1. File for update program

- 1) Download the latest "Update program of JAX-9B" from the Marine Service WEB.
The downloaded file is a self-extracting file.
The name of file is a "JAX9B-xxx-xxx".
The "xxx-xxx" means a "CPU software version – DSP software version".
- 2) Double-click the downloaded file. The self-extracting is started.
Select the "C:¥" for saving folder of extracted files.
"C:¥WFAX¥JAX-9B¥" is created

1.6.2. Preparation of update

- 1) Turn off JAX-9B.
- 2) Connect the PC to the COM port of JAX-9B. Refer to the 1.4 clause how to connect.
- 3) Set the SW1 of DIP-SW to ON.
Remove the cover from JAX-9B when the DIP-SW is not viewed
Refer to the 3.3 clause for procedure of removing the cover.



Refer to the 3.11 clause, position of the DIP-SW is indicated.
Be careful not to break the lever of DIP-SW.

- 4) Turn on JAX-9B.
JAX-9B is started in program update mode.

1. Maintenance Software

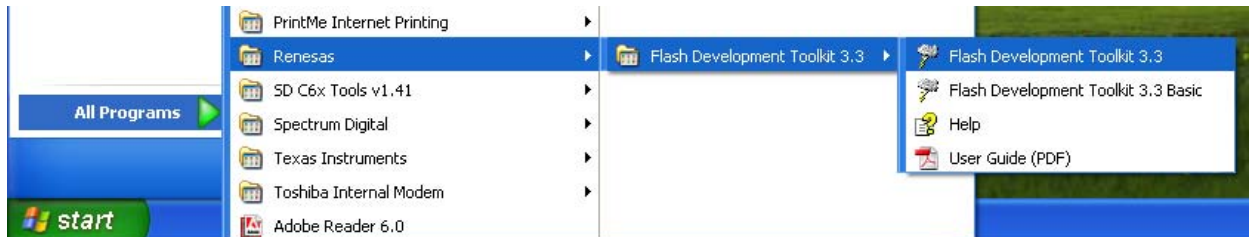
JAX-9B W-FAX Service Manual

1.6.3. Program update

1) Click the [Start] button on the Window OS. Put the mouse pointer on the “All Programs” menu.

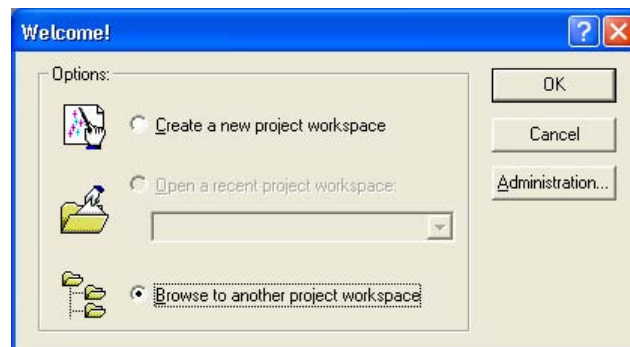
2) Start the update software of JAX-9B with the following procedure.

[Renesas] → [Flash Development Toolkit 3.3] → [Flash Development Toolkit3.3]



3) “Welcome” dialog appears.

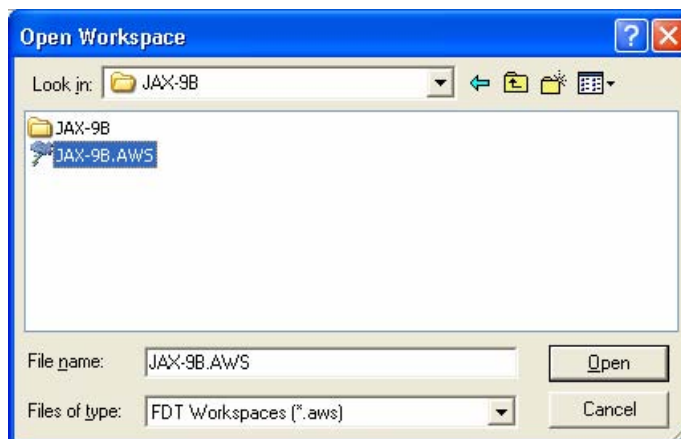
Select the “Browse to another project workspace”, and click the [OK] button.



4) “Open Workspace” dialog appears.

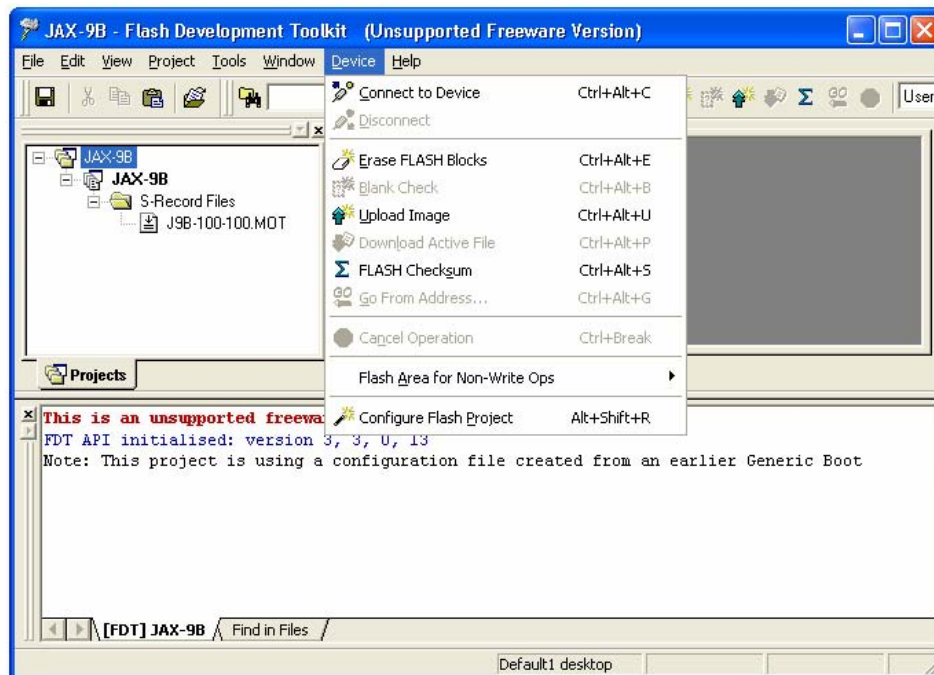
Select the top folder of downloaded files. (Refer to the 1.6.1 clause)

“C:\WFAX\JAX-9B\JAX-9B.AWS”

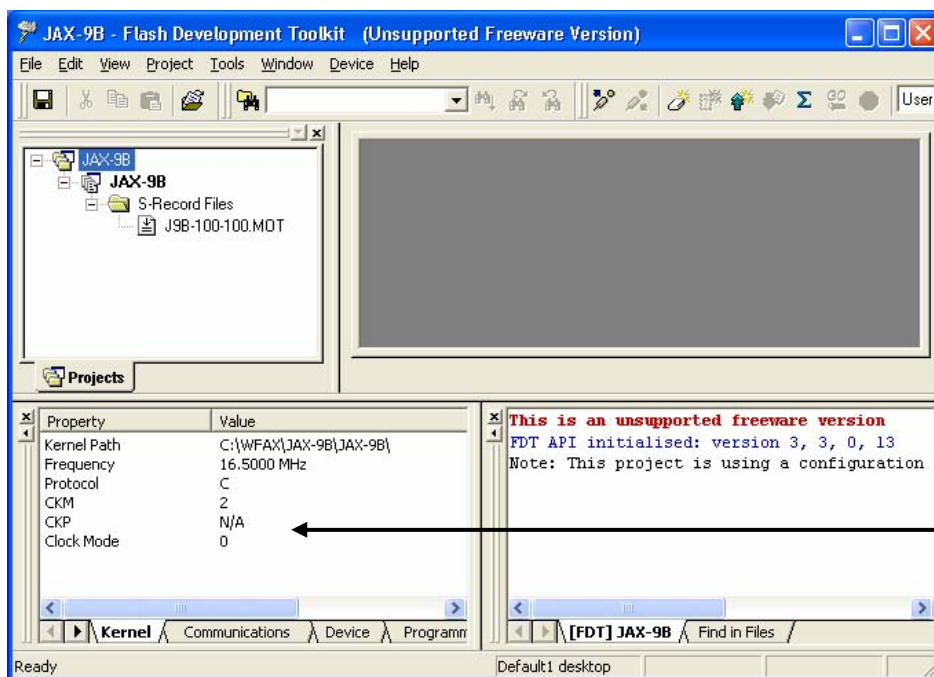


5) Select the using COM port number of the PC.

Click the “Device” menu and “Configure Flash Project”.



“Configure Flash Project” window appears.



1. Maintenance Software

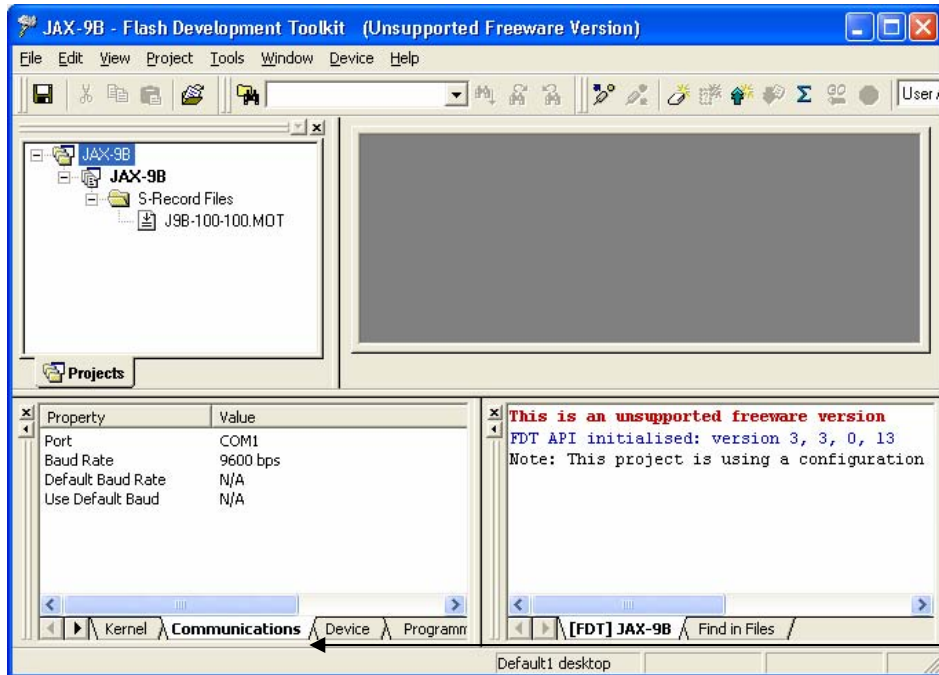
JAX-9B W-FAX Service Manual

Confirm the COM port number which is selected at present.

Change the Com port number if the using COM port number of the PC differs from the indicated number.

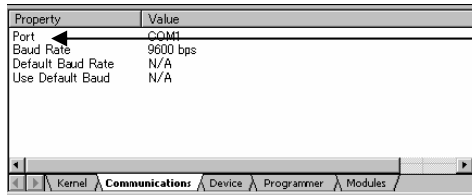
Click the “Communications” TAB, the “Communications” TAB screen appears.

* Confirm the COM number by referring to the 1.7 clause when the COM number is not recognized.

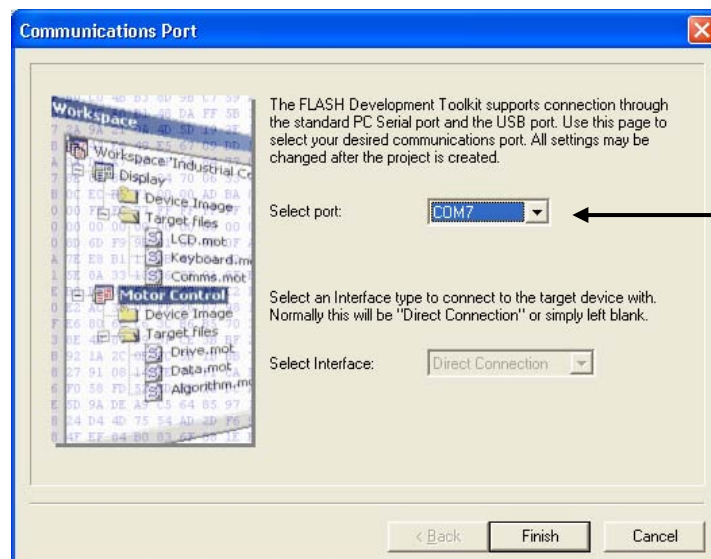


Select the using COM port number.

Click the “Port” in the following screen. Dialog for selecting the COM port number will appear.

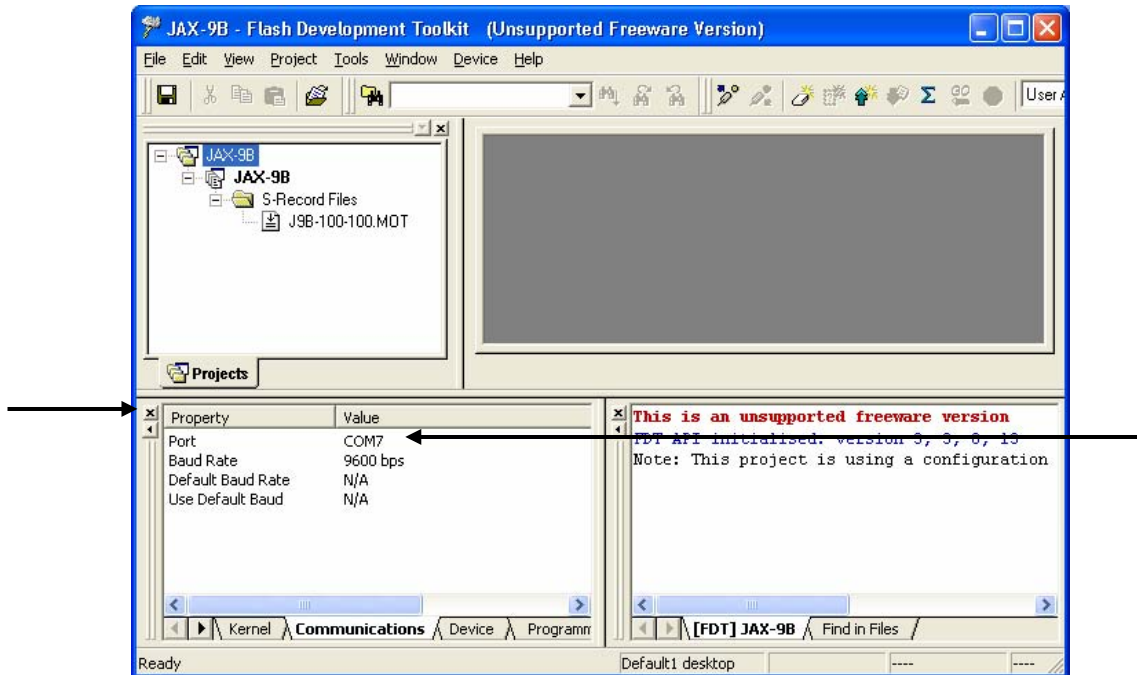


The following screen shows that the COM7 is selected.



Confirm that the indicated COM port number is changed.

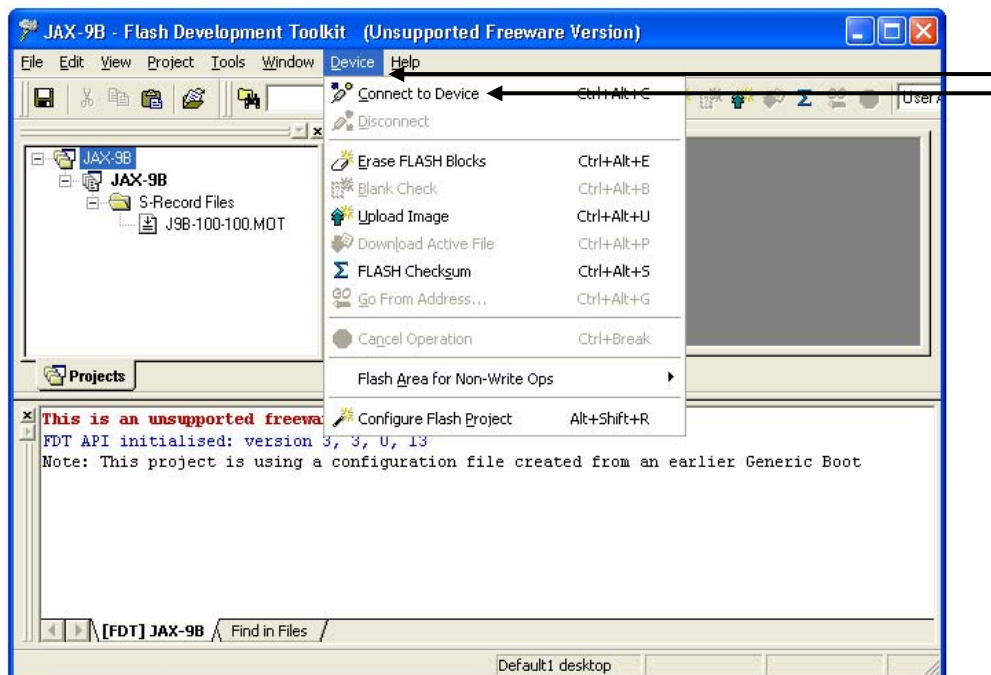
Close the “Configure Flash Project” window. Click the [X] button on the left upper side of the window.



6) Connect to JAX-9B.

Click the “Device” menu and “Connect to Device”.

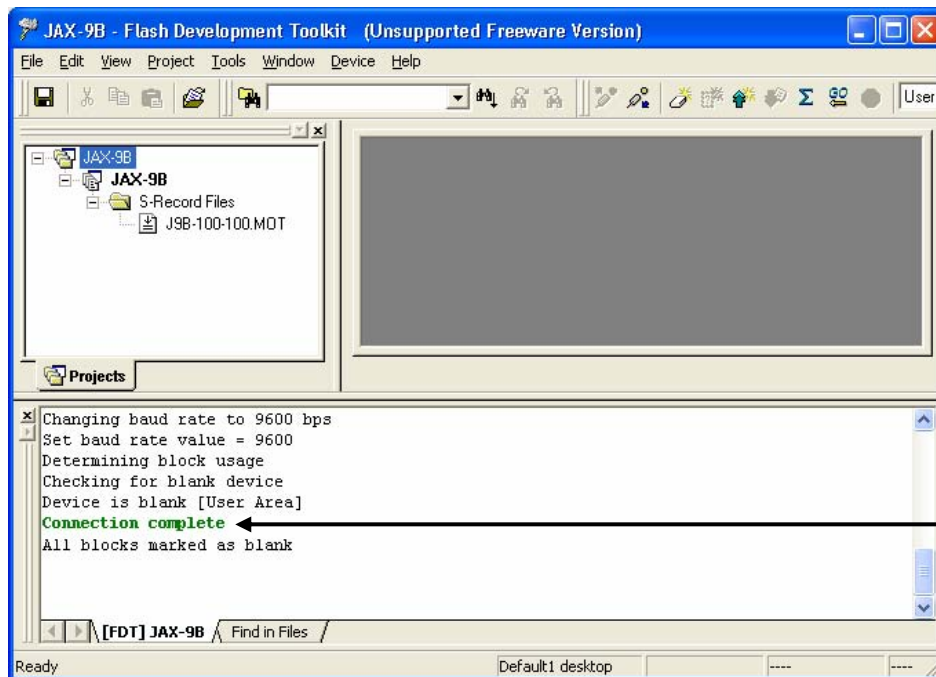
“Connection complete” message appears on the sequence window when the communication between the PC and JAX-9B is a success.



1. Maintenance Software

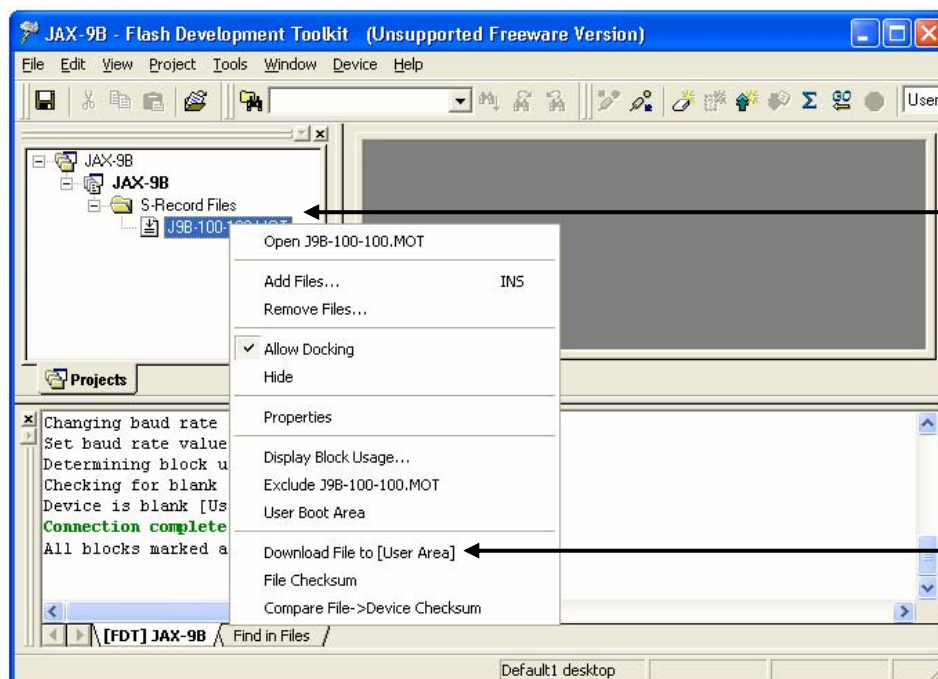
JAX-9B W-FAX Service Manual

“Connection complete” message appears on the sequence window when the communication between the PC and JAX-9B is a success.

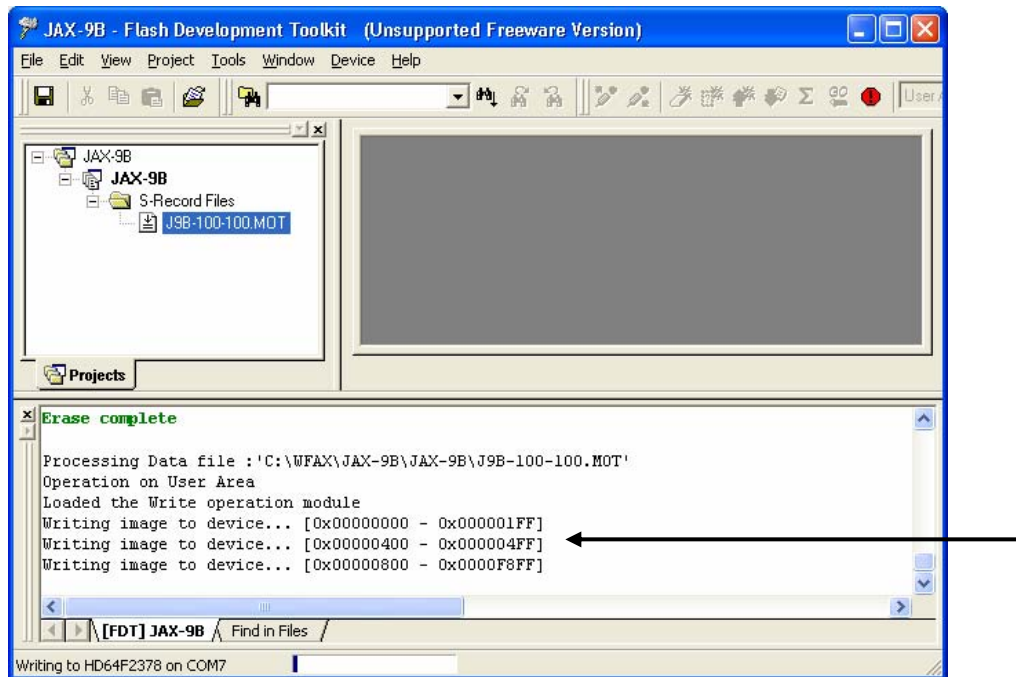


* Retry the "Connect to Device" after rebooting (OFF to ON) JAX-9B when the error message appears.

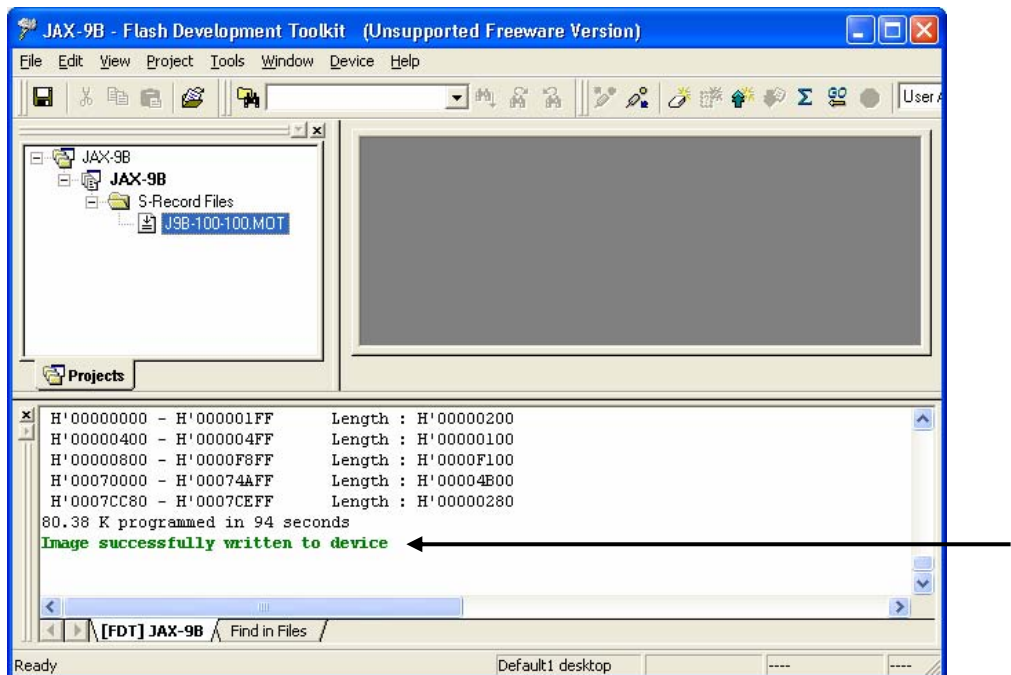
- 7) Put the mouse pointer on the “J9B-100-100.MOT”, and press the right side button of the mouse. The following menu appears. Click the “Downloaded File to [User Area]” on the following menu. The program update operation is started.



- 8) The sequence of writing the program data appears on the sequence window



- 9) "Image successfully written to device" message appears on the sequence window when the program update is completed.

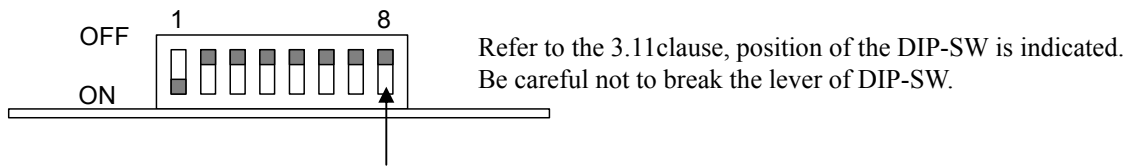


- 10) Exit the program update software.

1. Maintenance Software

JAX-9B W-FAX Service Manual

- 11) Set the SW1 of DIP-SW to OFF.



- 12) Reboot (OFF to ON) JAX-9B.

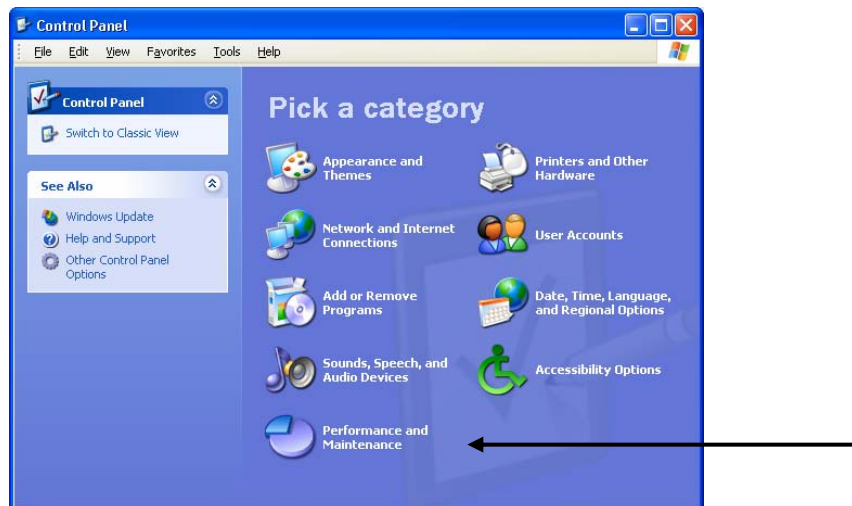
Check JAX-9B operation after updated.

Display the software version on the LCD of JAX-9B and confirm that it is a same version with the updated software.

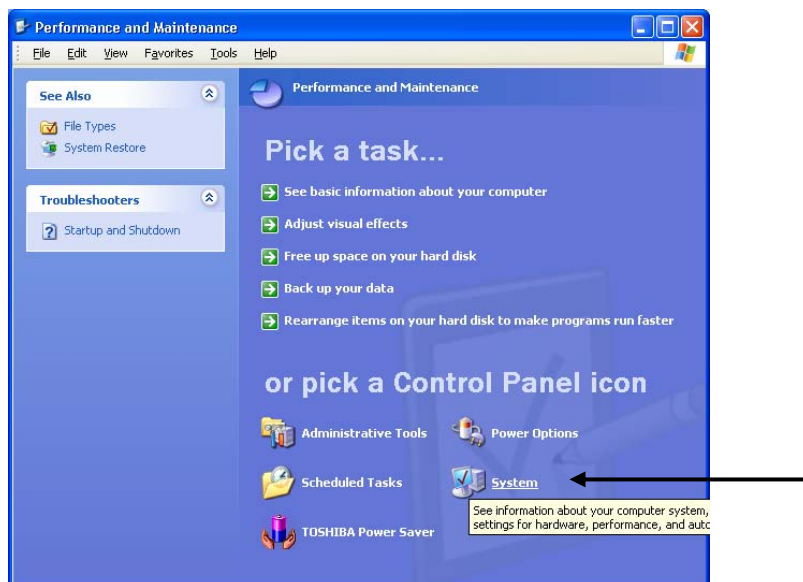
Operation: [#] + [0] (Refer to the 3.1 clause.)

1.7. Confirming a COM port number

- 1) Start the “Control Panel” of the Windows OS
- 2) Click the “Performance and Maintenance” on the “Control Panel” window.



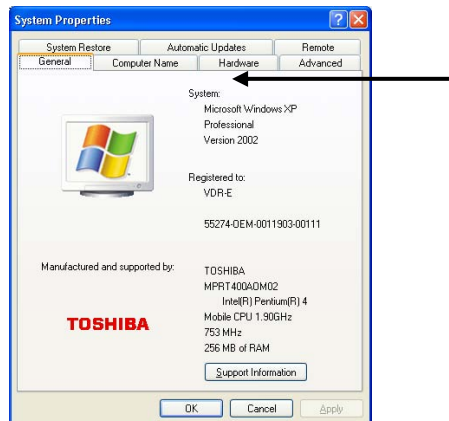
- 3) Click the “System” on the “Performance and Maintenance” window.



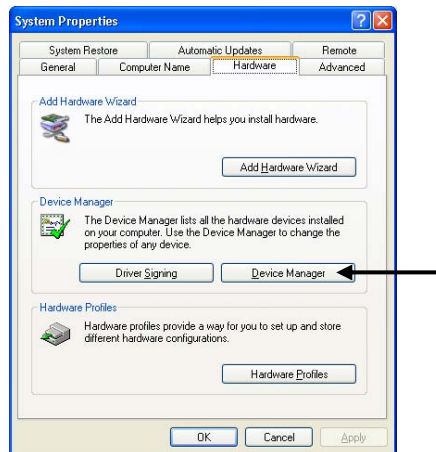
1. Maintenance Software

JAX-9B W-FAX Service Manual

- 4) Click the “Hardware” TAB on the “System properties” window.

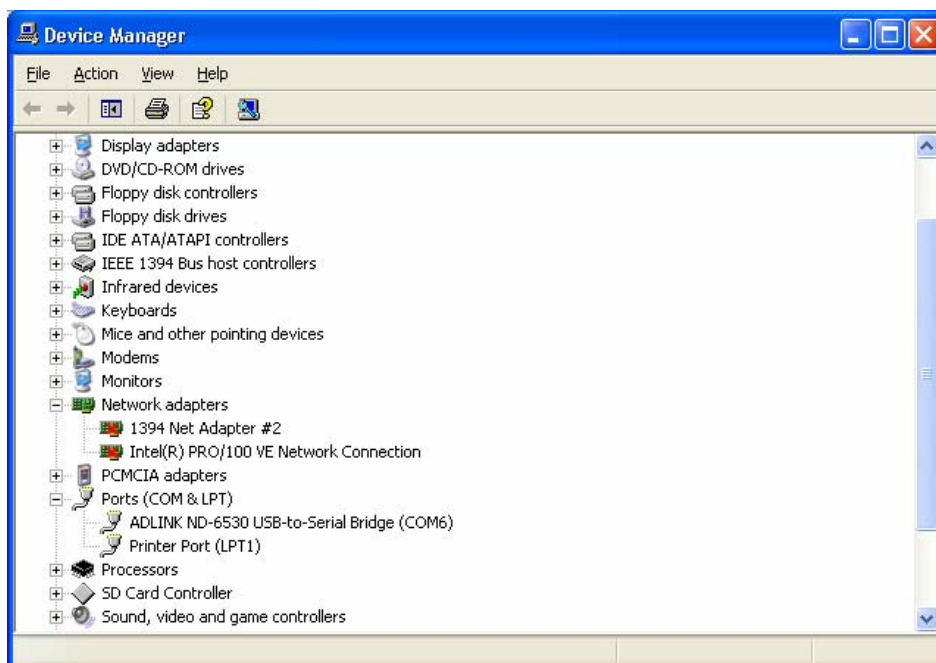


- 5) Click the [Device manager] button on the “Hardware” TAB screen.



- 6) Click the “Port (COM and LPT)”.

The “ADLINK ND-6530 USB-to-Serial Bridge (COMx)” is indicated on the “Port (COM and LPT)”. Check the COM number of “ND-6530”. The following screen shows that the port number of “ND-6530” is the COM6.



2. Checking operation

Check the operation of JAX-9B according to the following items after installation or maintenance.

2.1. Operation of Standard configuration

Item	Operating	Checking
Panel	Set the receiving frequency and the receiving mode.	Setting operation is accepted. Receiving mode and frequency is indicated on the LCD.
Receiving facsimile broadcast	Set JAX-9B so that facsimile image can be recorded.	JAX-9B records a normal facsimile image. Quality of printing is a normal.
SYNC control	Rotate the SYNC control dial while recording.	The recorded image is inclined to the same direction of rotating dial.
Monitor	Rotate the speaker volume dial	The volume of monitor is turned up or down.
Paper sensor	Remove the recording paper.	The message of "Paper empty" appears on the LCD.
	Return the recording paper.	The message of "Paper empty" disappears on the LCD.
GPS connection	Correct the internal clock manually.	The message of "GPS OK" appears on the LCD.
Registered data	Print out the list of frequency channels.	The registered data are printed.
	Print out the list of timer programs.	The registered data are printed.

2.2. Displaying the receiving FAX images by the PC (Option)

(Under development)

Item	Operating	Checking
Receiving facsimile broadcast	Set JAX-9B so that facsimile image can be recorded.	The FAX image which JAX-9B is recording is displayed also on the screen of PC. The file of FAX image is saved in the PC automatically.
Setup	Register the frequency channels and timer programs by the PC	Input data is registered to JAX-9B.

2. Checking Operation

JAX-9B W-FAX Service Manual

3. Maintenance

3.1. Program version of JAX-9B

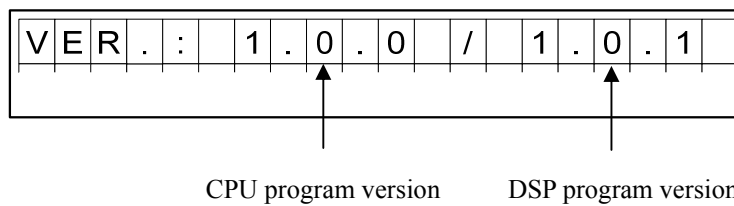
The CPU program version and DSP program version of JAX-9B is indicated on the LCD.

Operation procedure

- 1)  : Set the combined function mode.
- 2)  : Indicate the program version number on the LCD.

* The software version indication automatically disappears after about 5 seconds indication.

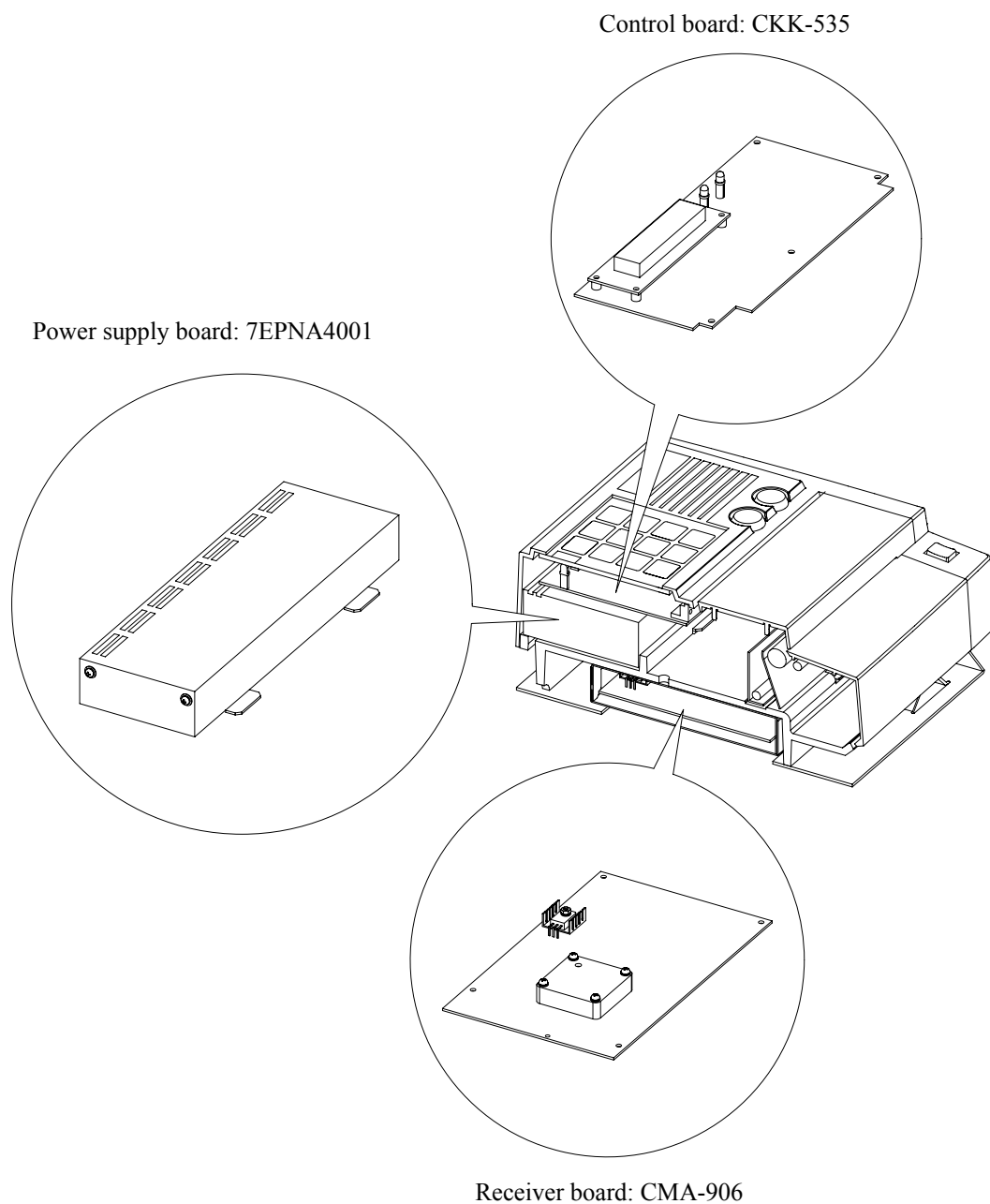
Version: The following example indicates “CPU: 1.0.0” and “DSP: 1.0.1”.



3. Maintenance

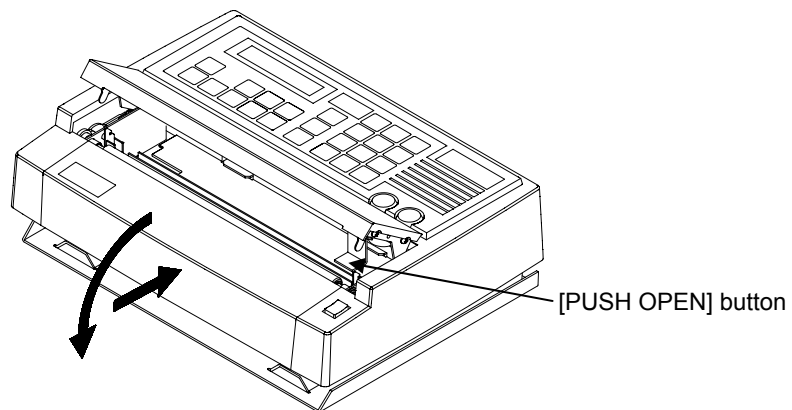
JAX-9B W-FAX Service Manual

3.2. Position of each circuit board

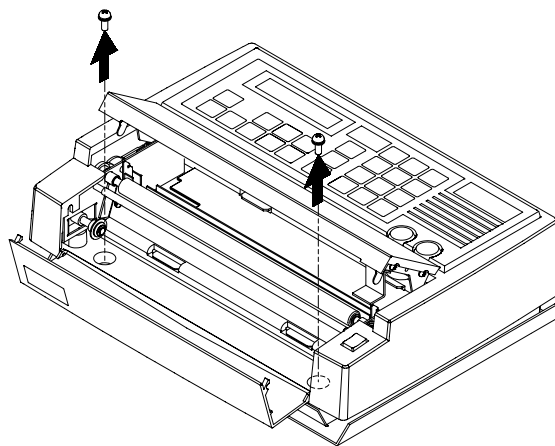


3.3. Removing the Cover of JAX-9B

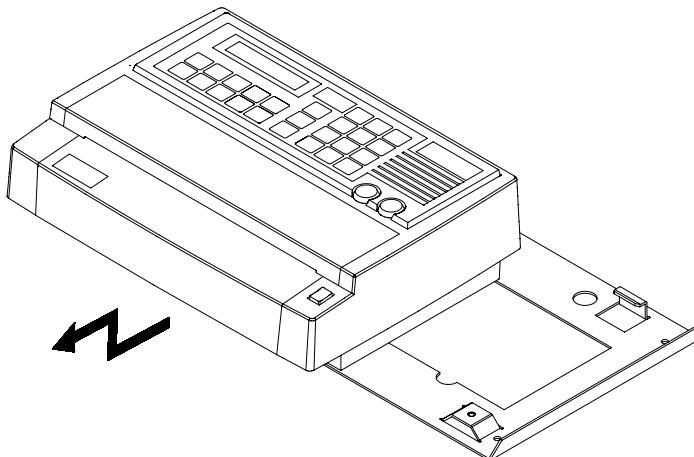
- 1) Turn off the circuit breaker of the electricity distribution board, to which JAX-9B is connected.
Separate the terminal (TB101) of JAX-9B and cut the power source.
- 2) Press the PUSH OPEN button. The top cover opens.
- 3) While pushing the bottom of the front cover against the facsimile body, pull the top of the front cover toward you to open.
- 4) Remove the paper roll.



- 5) Remove two screws on the bottom of the paper holder.



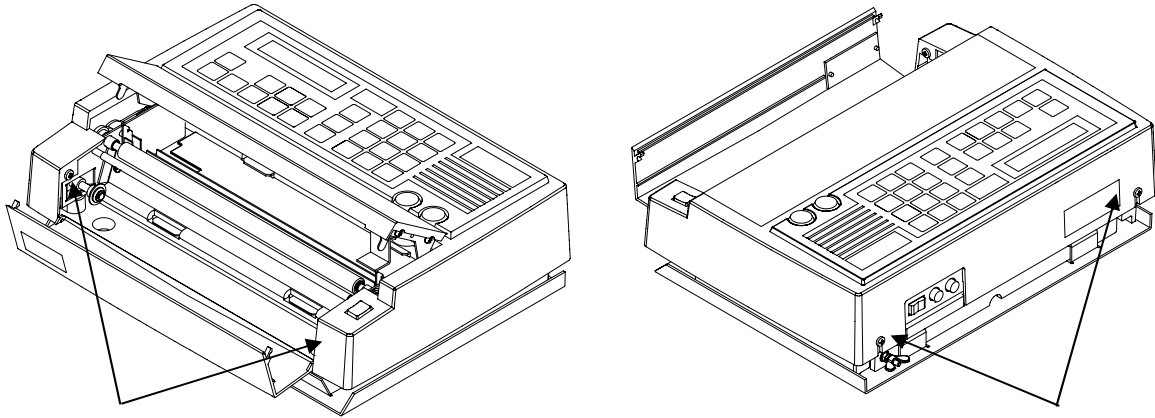
- 6) Pull the facsimile body toward you (in the arrow direction) until the facsimile body comes off the mounting base.



3. Maintenance

JAX-9B W-FAX Service Manual

- 7) Unscrew the four screws for fixing the cover to the main frame. Remove the cover from JAX-9B.

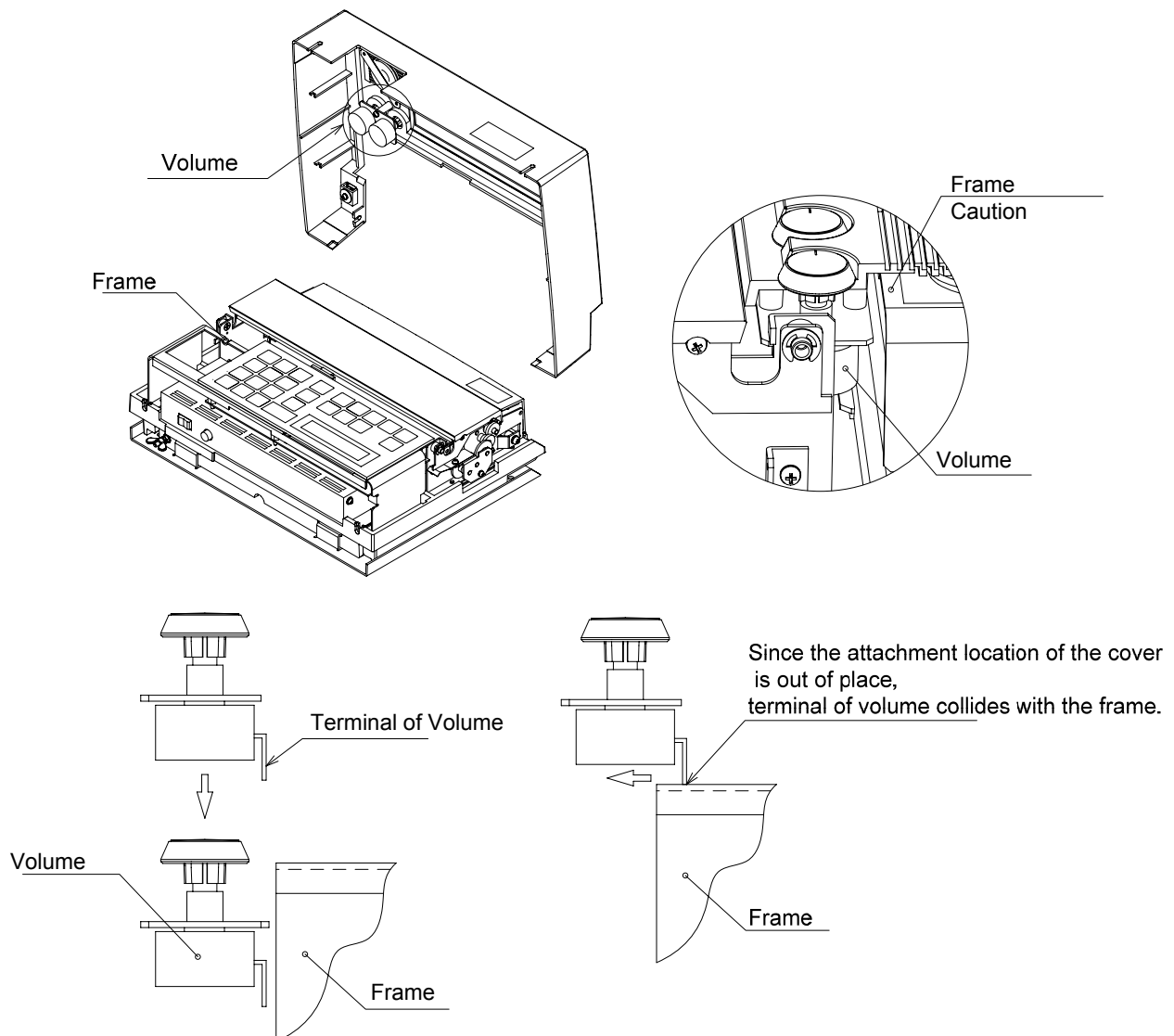


- 8) A speaker and two volumes are fixed on the cover. Disconnect the cable with speaker and volumes from J501 connector on the control board.

3.4. Attaching the Cover of JAX-9B

Caution : The cover cannot be attached on the frame of JAX-9B, if the terminal of volume touches on the frame.
When attachment of a case cover is not smooth, do not push the cover strongly with checking that there is a clearance between the terminal of volume and the frame.

- 1) A speaker and two volumes are fixed on the cover. Connect the cable with speaker and volumes from J501 connector on the control board.
- 2) Attach the case cover with caution not to touch the terminal of volume on the frame.

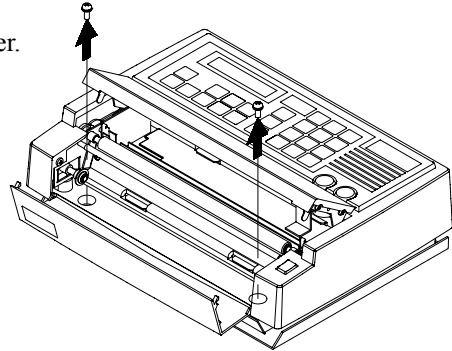


- 3) Fix the cover to the frame of JAX-9B with four screws. (Refer to the 3.3 clause)

3.5. Replacing the Control board (CKK-535)

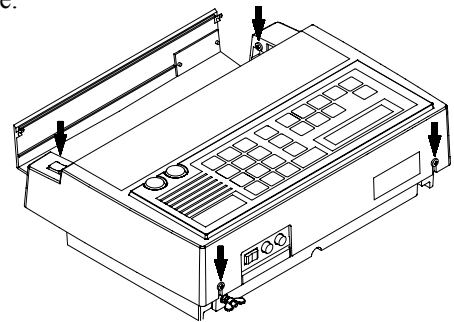
1) Remove JAX-9B from the mount base. (Refer to the 3.3 clause.)

- Unscrew the two screws on the bottom of the paper holder.



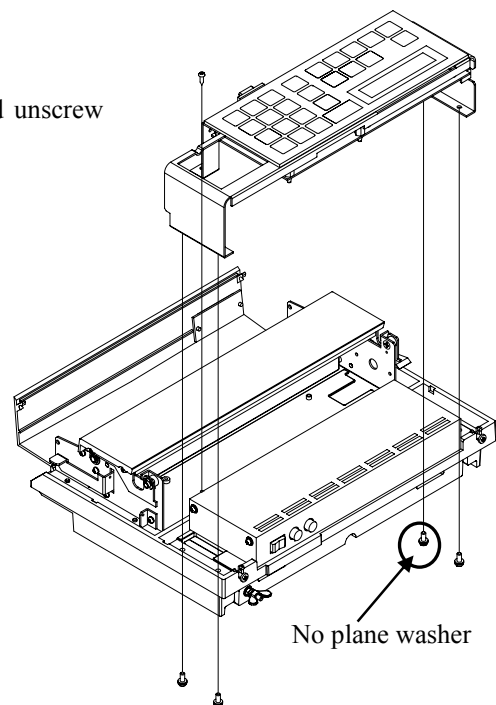
2) Remove the cover from the main frame.

- Unscrew the four screws for fixing the cover to the main frame.



3) Remove the panel unit from the main frame.

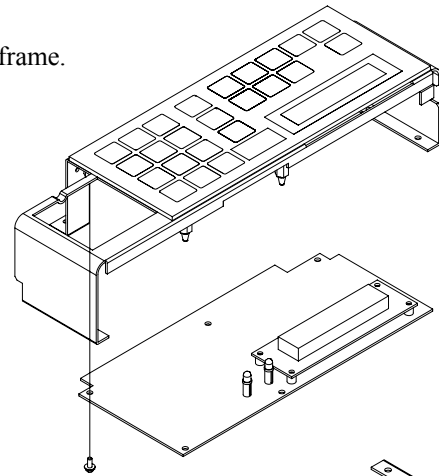
- Unscrew the one screw from the upper surface and unscrew the four screws from the bottom.



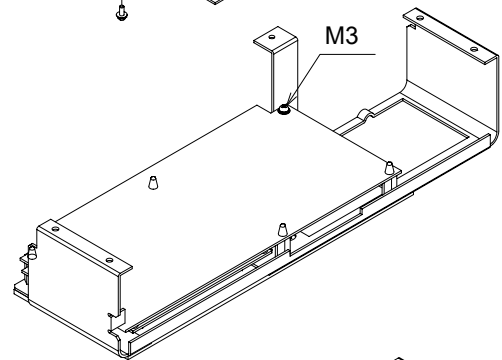
4) Remove the control board from the panel unit.

- Unscrew the one screw for fixing the control board to the frame.
Release the PCB clamps for fixing the control board

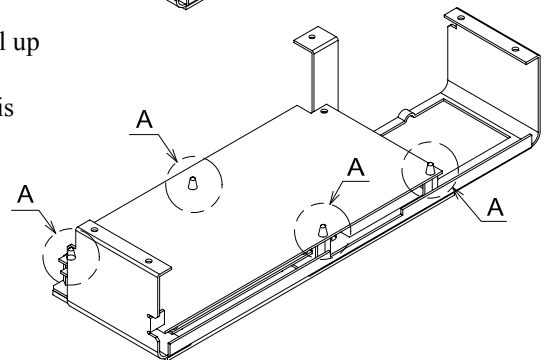
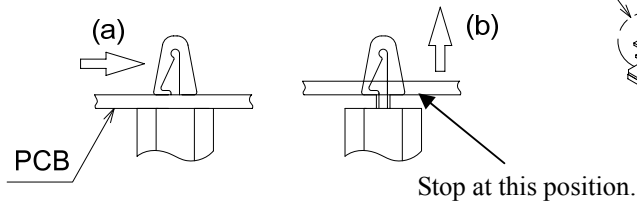
Detail of procedure is shown below.



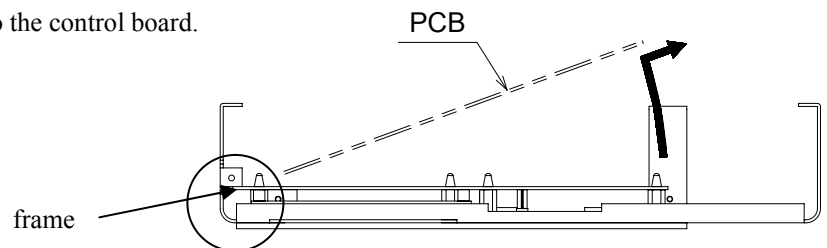
4-1) Unscrew the M3 screw.



4-2) Press the clamps in horizontal direction (a), and pull up the control board (b).
Stop like in the following figure in the place which is released from fixing of clamp.
Release the four points (A).



4-3) Pull out the control board in the direction of slant.
Frame is pressing down at one point of the control board.
Be careful for giving no stress to the control board.



5) Replace the control board.

In the reverse way, put the new control board into JAX-9B.

3.6. Replacing the Power supply board (7EPNA4001)

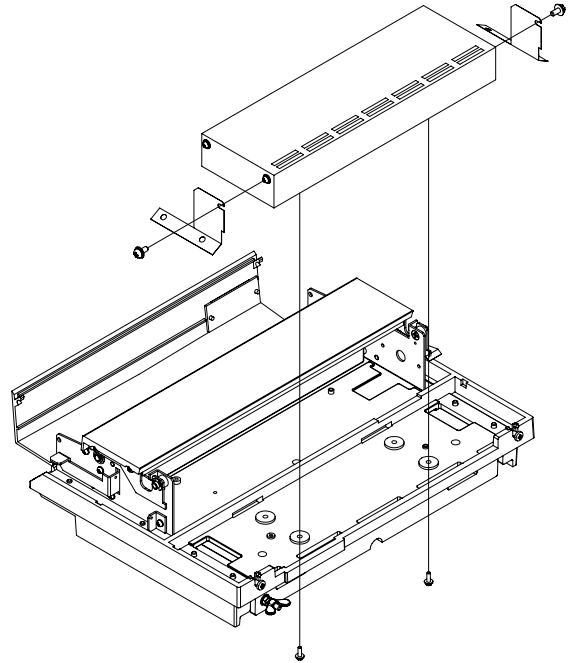
1) Remove the panel unit from the main frame. (Refer to the 3.5 clause.)

2) Remove the power supply unit from the main frame.

- Unscrew the two screws from the bottom.

3) Remove the two fixing brackets of power supply unit.

- Unscrew the two screws for fixing bracket on the right side and the left side.



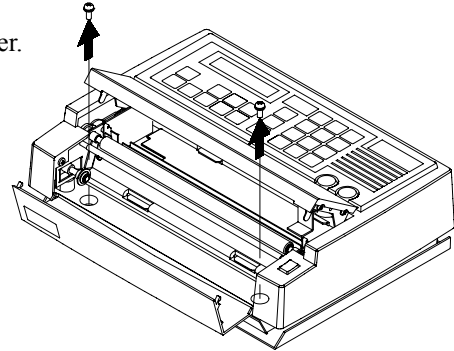
4) Replace the power supply board.

In the reverse way, put the new power supply board into JAX-9B.

3.7. Replacing the Receiver board (CMA-906)

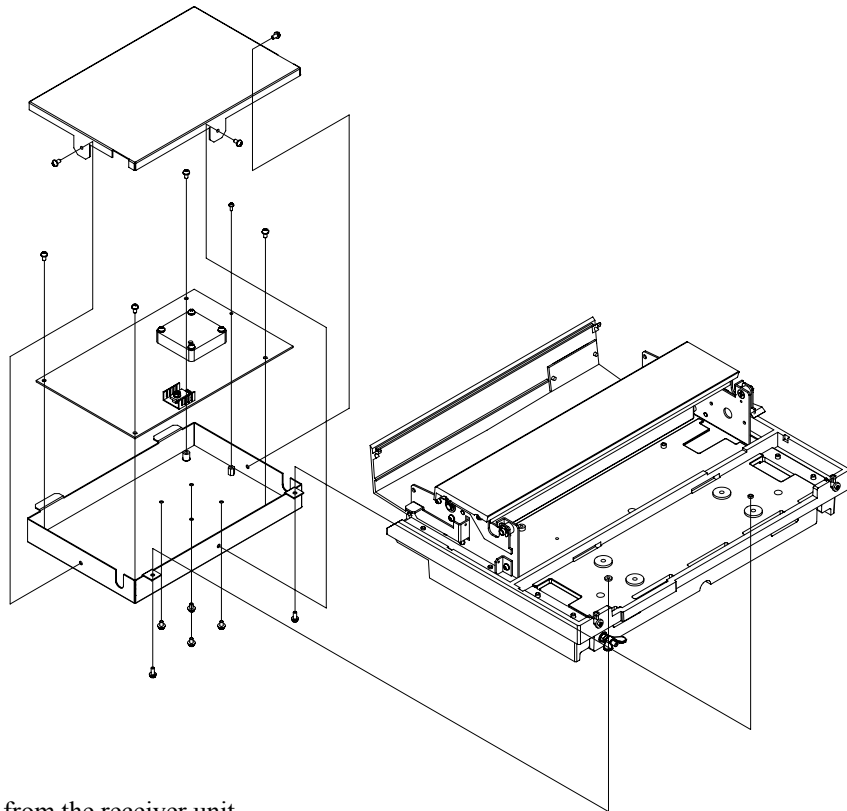
1) Remove JAX-9B from the mount base. (Refer to the 2.2 clause.)

- Unscrew the two screws on the bottom of the paper holder.



2) Remove the receiver unit from the main frame.

- Turn JAX-9B over and unscrew the two screws for fixing the receiver unit.



3) Remove the top cover from the receiver unit.

- Unscrew the three screws for fixing the top cover.

4) Remove the receiver board from the chassis of the receiver unit.

- Unscrew the five screws from the upper surface and unscrew the four screws from the bottom.

5) Replace the receiver board.

In the reverse way, put the new receiver board into JAX-9B.

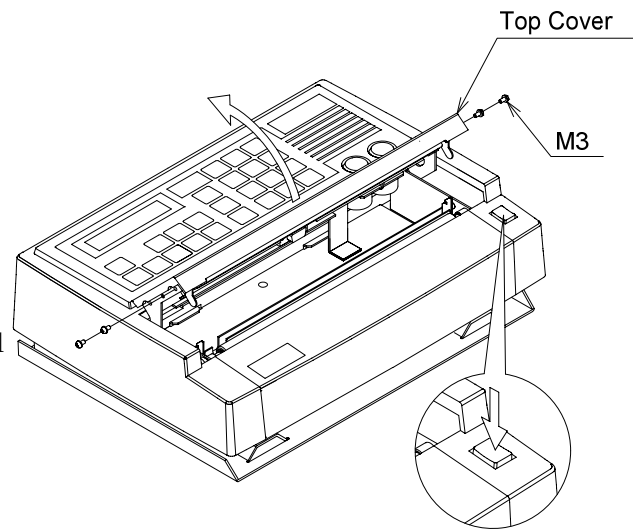
3. Maintenance

JAX-9B W-FAX Service Manual

3.8. Replacing the Thermal head

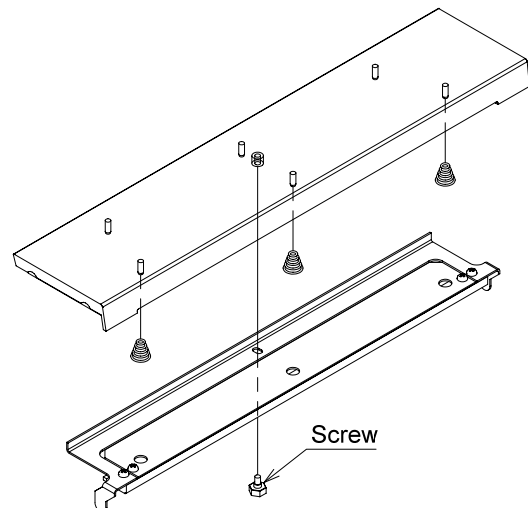
1) Remove the thermal head.

- Press the PUSH OPEN button to open the top cover of JAX-9B.
- Unscrew the four M3 screws on the both side.
- Disconnect the cable from the thermal head.



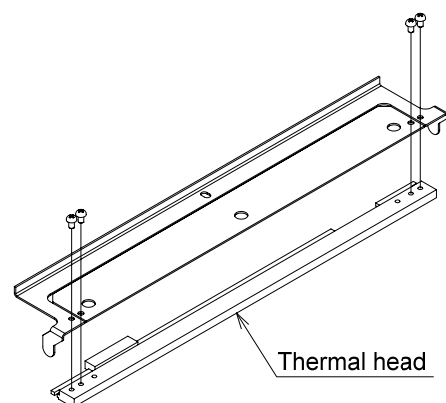
2) Remove the top cover from the thermal head.

- Unscrew the screw for fixing the top cover.
- Three springs are put between the thermal head and the top cover.



3) Remove the thermal head from the fixing frame.

- Unscrew the four self-tapping screws.



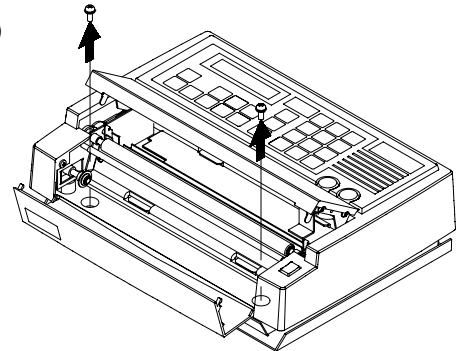
4) Replace the thermal head.

In the reverse way, put the new thermal head into JAX-9B.

3.9. Replacing the Motor

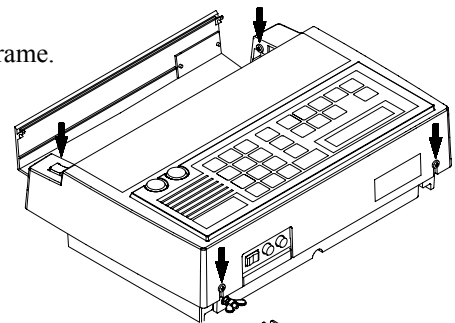
1) Remove JAX-9B from the mount base. (Refer to the 3.3 clause.)

- Unscrew the two screws on the bottom of the paper holder.



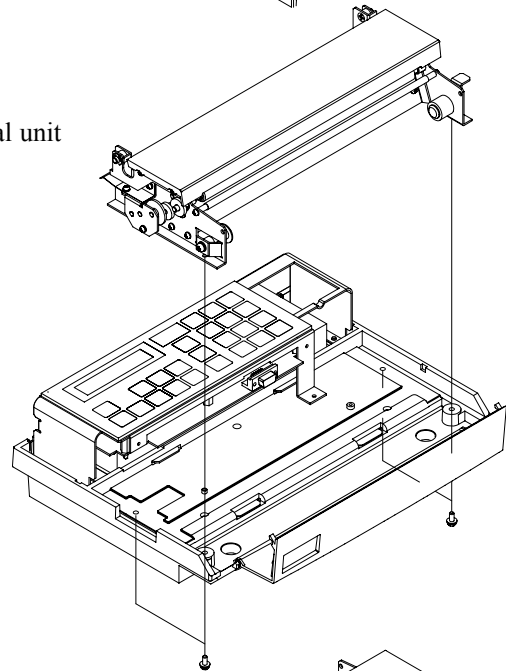
2) Remove the cover from the main frame.

- Unscrew the four M4 screws for fixing the cover to the main frame.



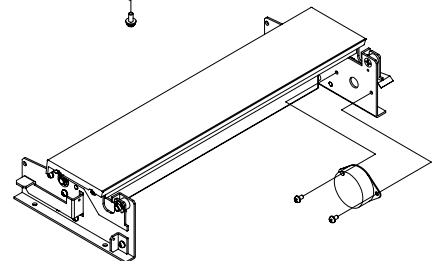
3) Remove the mechanical unit from the main frame.

- Unscrew the four M4 screws for fixing the mechanical unit to the main frame.
- Disconnect the cable of motor from the control board.
- Disconnect the cable from the thermal head.



4) Remove the motor from the mechanical unit.

- Unscrew the two M3 screws for fixing the motor to the mechanical unit.



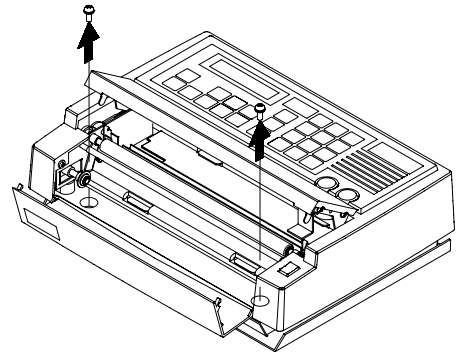
5) Replace the motor.

In the reverse way, put the new motor into JAX-9B.

3.10. Replacing the Gear Assy and Spur Gear

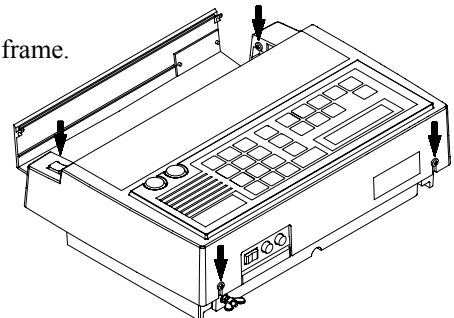
1) Remove JAX-9B from the mount base. (Refer to the 3.3 clause.)

- Unscrew the two screws on the bottom of the paper holder.



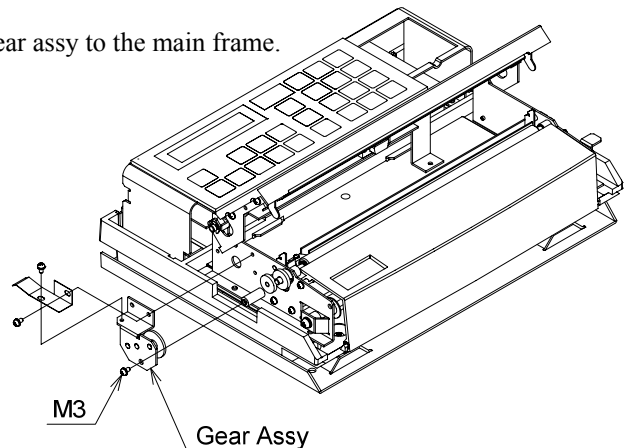
2) Remove the cover from the main frame.

- Unscrew the four M4 screws for fixing the cover to the main frame.



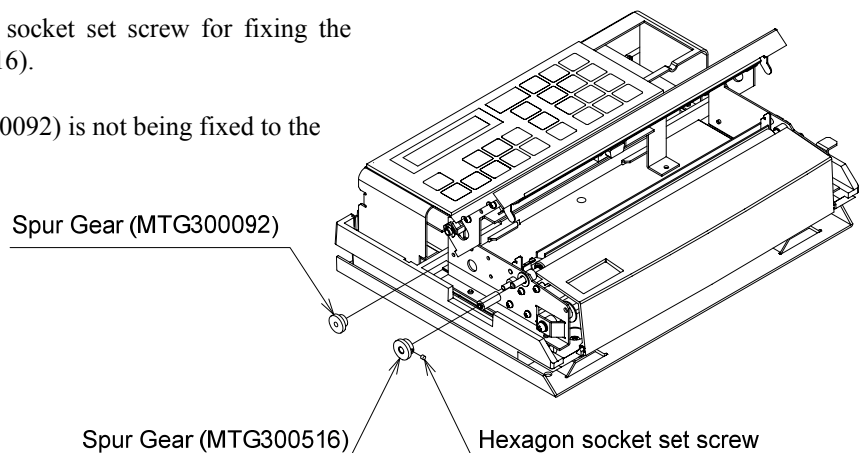
3) Remove the gear assy from the main frame.

- Unscrew the three M3 screws for fixing the gear assy to the main frame.



4) Remove the spur gears from the main frame.

- Unscrew the hexagon socket set screw for fixing the spur gear (MTG300516).
- The spur gear (MTG300092) is not being fixed to the shaft of a frame.



5) Replace the gear assy and spur gears.

In the reverse way, put the new gear assy and spur gears into JAX-9B.

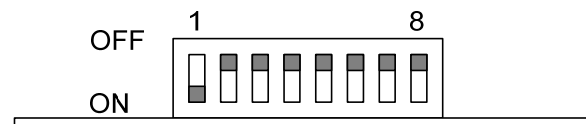
3.11.Control board (CKK-535)

The control board has the DIP-SW for setting the operating mode of JAX-9B.
Set the DIP-SW for the following mode.

- Program update of JAX-9B
- Support the old receiver board (CKK-527).

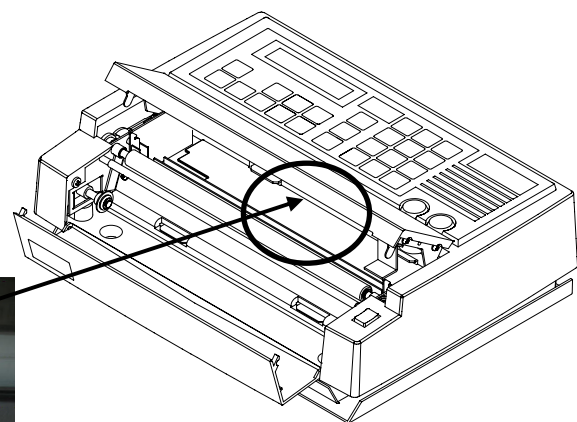
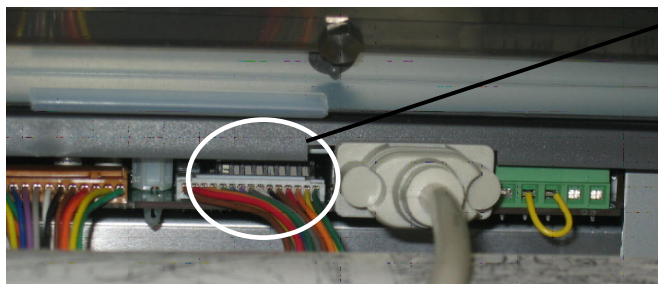
1) DIP-SW setting

DIP-SW	Default setting	Operating mode
1	ON	CPU Debug (JTAG) OFF: Normal operating mode ON: CPU debugging mode (JTAG)
2	OFF	DSP Debug OFF: Normal operating mode ON: DSP debugging mode
3	OFF	Not used
4	OFF	Not used
5	OFF	Receiver board selection OFF: CMA-906, CMA-767(present model) ON: CKK-527 (old model)
6	OFF	Not used
7	OFF	Not used
8	OFF	Program update of JAX-9B OFF: Normal operating mode ON : Program update mode



DIP-SW: Default setting

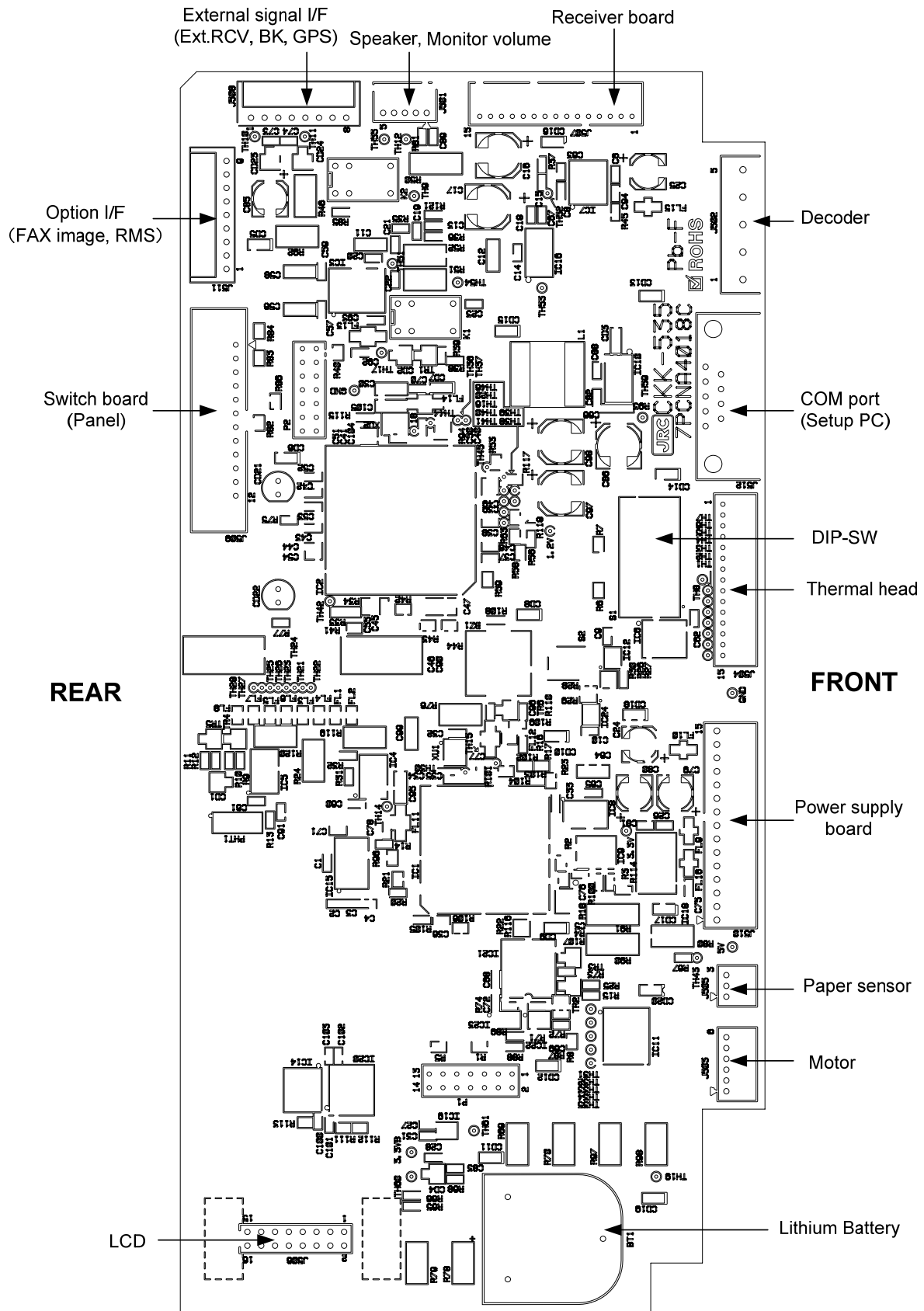
2) Position of the DIP-SW



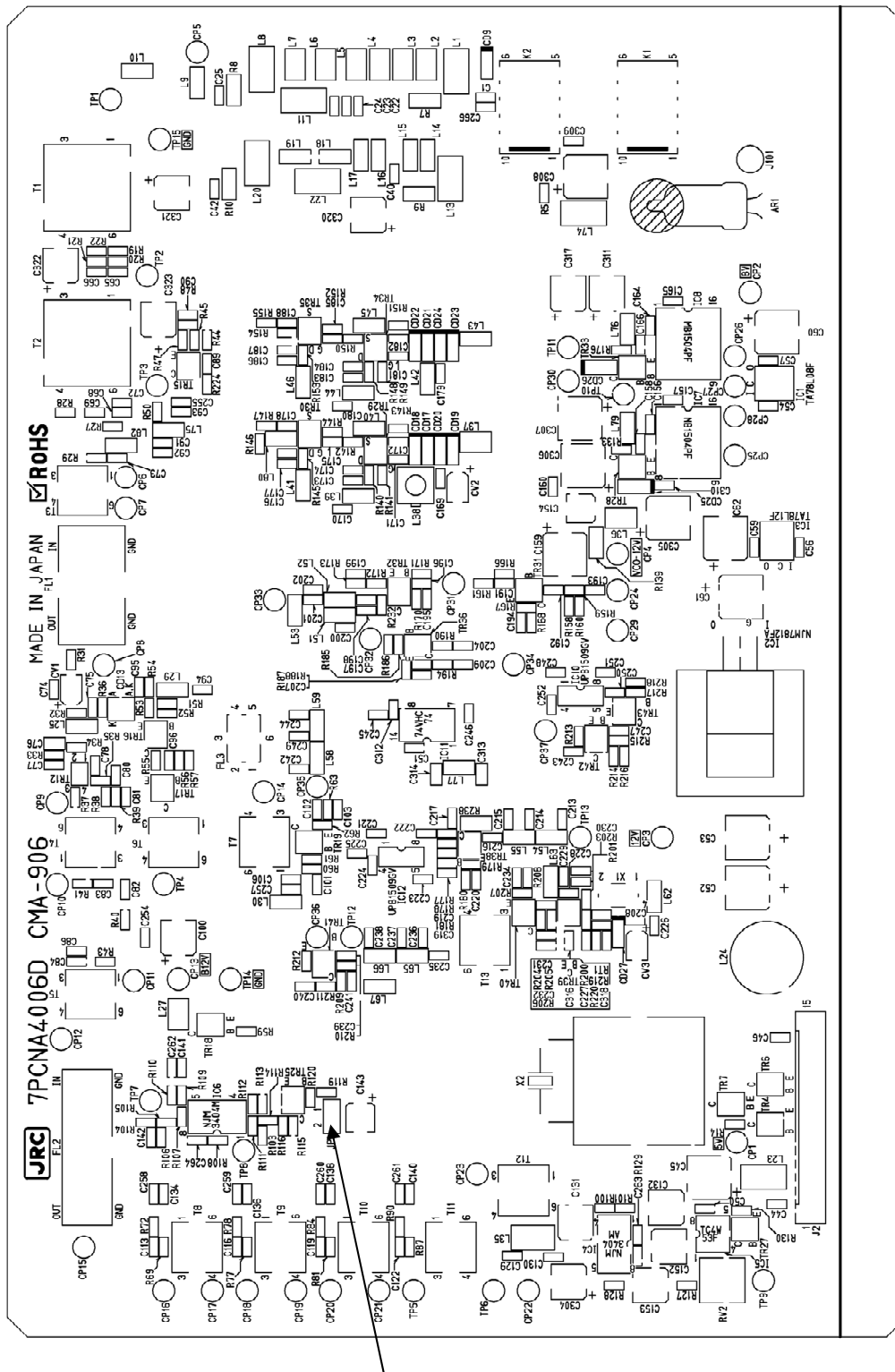
The DIP-SW is located behind the connector.
Be careful not to break the lever of DIP-SW.

3. Maintenance

JAX-9B W-FAX Service Manual



3.12.Receiver board (CMA-906)



Check that the JP1 is open. (Short-circuit: for inspecting)

3. Maintenance

JAX-9B W-FAX Service Manual

3.13. Replacing Recording Paper

⚠ CAUTION



Use the recording paper (6ZPTS00108) as specified by JRC.

The use of any other unspecified paper may cause recording density blurs, abnormal paper feed, much dust, resulting in the damage of the recording device.



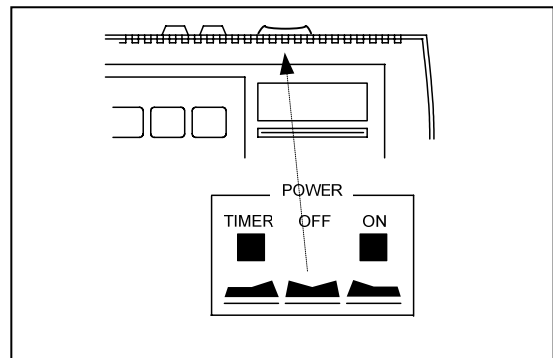
Do not store the recording paper in a place exposed to a high temperature, high humidity or direct sunlight. Otherwise, recording density blurs may be caused.

When the remaining section of the recording paper is approximately 2m long, a red ending mark appears on it. Then, prepare for replacing the recording paper.

JAX-9B automatically stops when the recording paper is used out, and end-of-paper message appears on the LCD.

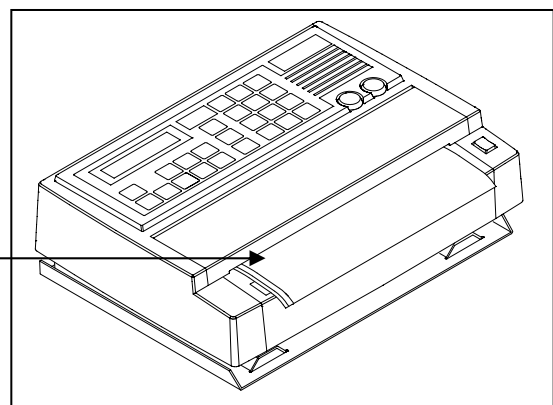
Procedure of replacing recording paper

- 1) Turn off the power of JAX-9B.

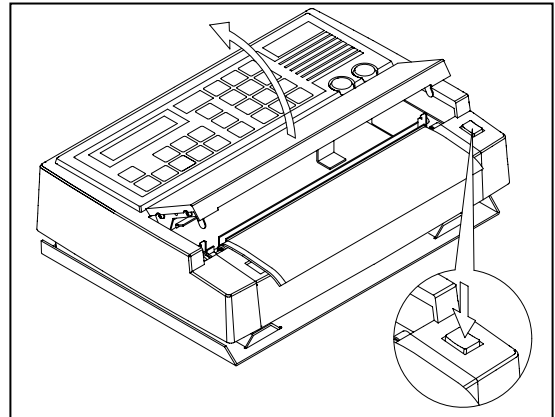


- 2) A red band as ending mark appears.

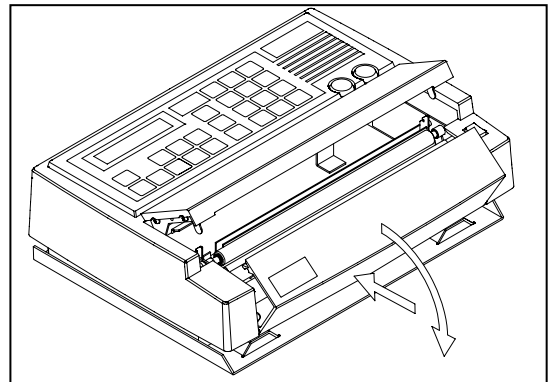
Ending mark



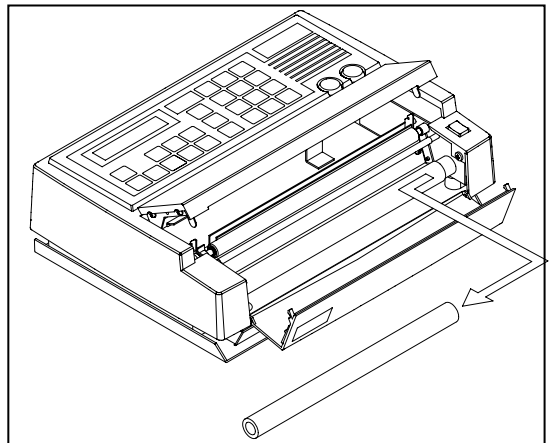
- 3) Press the PUSH OPEN button to open the top cover of JAX-9B.



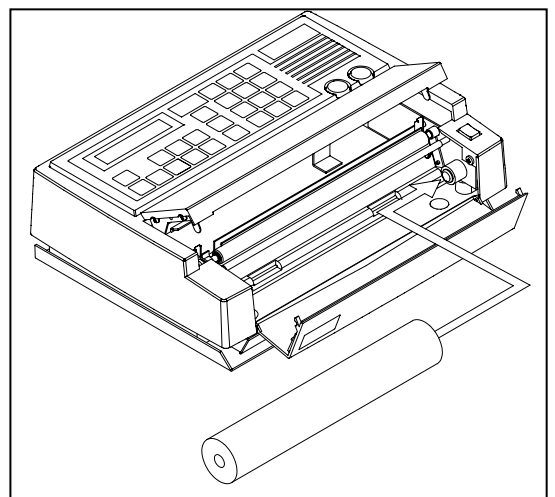
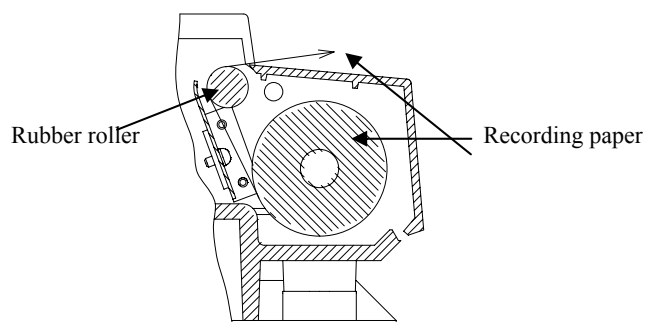
- 4) Open the front cover of JAX-9B. In order to open it, pull the upper part of the front cover toward you while pushing its lower part against the facsimile body.



- 5) Remove the core of the used paper roll from the paper holder. Push the core toward the left to remove.



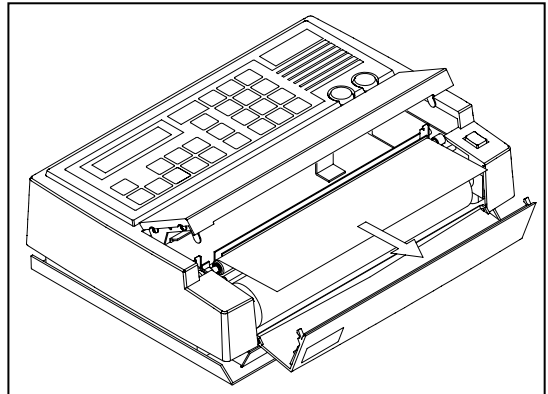
- 6) Put a new recording paper roll in the paper holder and let the recording paper through under the rubber roller as shown below.



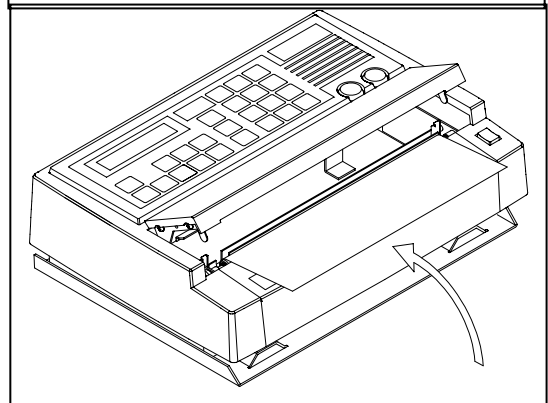
3. Maintenance

JAX-9B W-FAX Service Manual

- 7) Pull the leading part of the paper straight toward you. Do not let it slack.

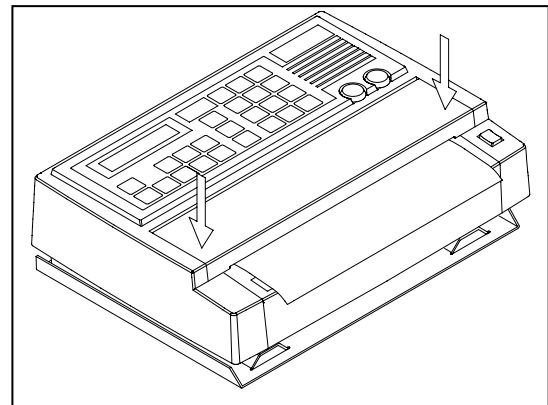


- 8) Close the front cover of JAX-9B while pulling the recording paper.



- 9) Ensuring that the paper is well tensioned not to be slack by pulling with one hand, slowly push down the top cover until it is locked with both hands at the end.

Push down the top cover until it is locked with a click.



3.14.Cleaning

CAUTION



Clean the thermal head with a piece of soft cloth. Do not rub it with a screw driver or file. Otherwise, the thermal head may be damaged.

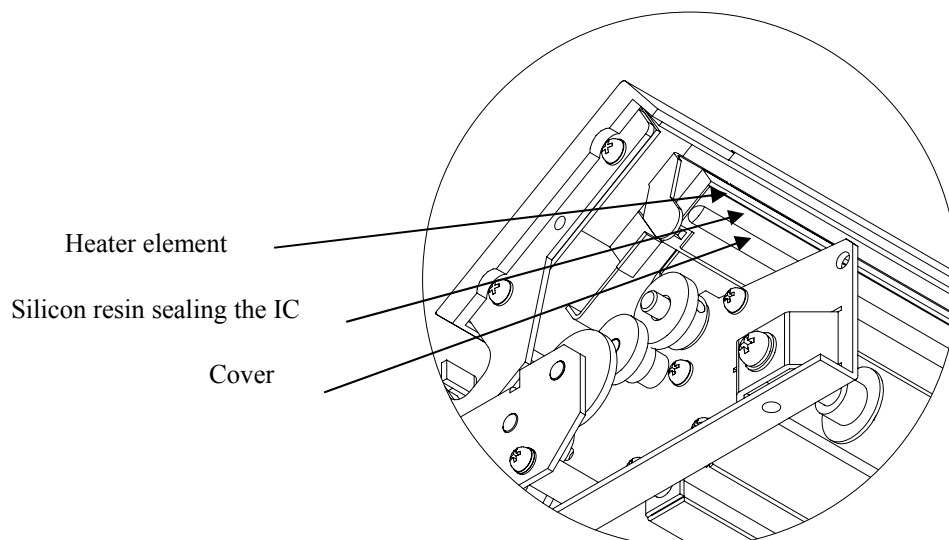
JAX-9B is designed for maintenance-free use and does not need much daily work, but JAX-9B should always be kept clean. No smell or dust is generated in recording, but small paper dust is generated a little because the thermal head is contacted onto the recording paper. Therefore, clean the following points once per one month:

3.14.1. Cleaning the thermal head

- 1) Turn off the power of JAX-9B.
- 2) Wipe the heater element of the thermal head lightly with a piece of soft cloth moistened with alcohol.

NOTE

- Tap and wipe the thermal head lightly not to apply an excessive force to it.
- Do not touch the exposed silicon resin that seals the IC chip (at the front end of the cover).

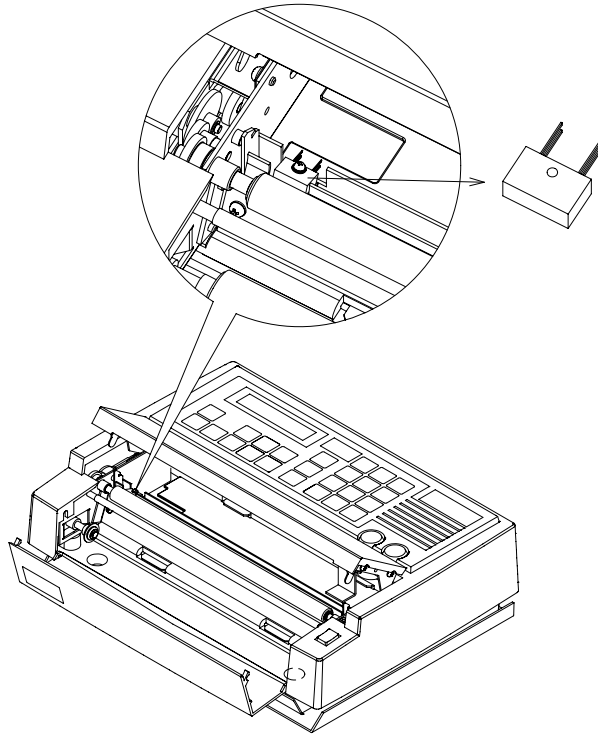


Recording mechanism (viewed from the front side with the top cover opened)

3. Maintenance

JAX-9B W-FAX Service Manual

3.14.2. Cleaning the paper sensor



The light emitting device and the photo detector are arranged.

The paper sensor does not detect the paper if the surface is covered with dust and paper dust, etc.

Clean the paper sensor when the paper sensor is not working normally.

3. Maintenance

JAX-9B W-FAX Service Manual

3.16. Service Parts

The list of service parts in stock for repairing

No.	Item	Part name	Model	Remark
1	JAX-9B	Control board	CKK-535	with battery (socket)
2		Receiver board	CMA-906	with chassis and antenna cable
3		DC/DC Power supply board	7EPNA4001	
4		Thermal head	WQ256-Q1(H)	*1
5		Motor	7BPNA4001	
6		Battery	CR2032	Service life: approx. 5 years.
7		Sheet Switch	7SCNA4001	Panel
8		Cable with connector	7ZCNA4050A	Ext. I/F: AF, BK, GPS
9		Gear Assy	MPGK31225A	
10		Spur Gear	MTG300092	
11		Spur Gear	MTG300516	
12	Option	Rectifier unit	NBA-5143	
13		Junction box	JQD-69C	Cable insertion 12mm diameters
14		Whip antenna (L=6MT)	NAW-60	6m
15		PC Interface kit	7ZZNA4016	Terminal Block (TB103) for connecting PC, Cable clamp
16		FAX image display kit	7ZZNA4017	PC software for displaying image Communication I/F Unit
17	Consumption articles	Recording paper	6ZPTS00108	20m/roll

*1 The life of thermal head
Printing distance: 30km

Paper size (standard document): 256 x 364 [mm]

In case of recording 20 pieces of FAX image per a day.
 $30000 / (364 / 1000 \times 20) = \text{Approx 10 years}$

4. Troubleshooting

4.1. Failure example and countermeasure

Failure	Cause	Countermeasure
Paper feed and recording are impossible.	The recording paper is tilted or slackened and deviated from the paper sensor.	Set the recording paper properly.
	Unlocked the top cover. (Mechanism part with the thermal head)	Push down the top cover firmly until it is locked with a click.
	The paper sensor (left below the rubber roller) is contaminated with paper dust.	Clean the paper sensor carefully.
	The paper sensor is disconnected.	Check that the paper sensor is connected to J505 connector on the control board (CKK-535).
Recording does not start.	The parameter SCAN SPEED is erroneous.	Adjust the SCAN SPEED.
	The receiving condition is no good.	Change the frequency to the good receiving condition.
	The register operation of a timer program has not been completed. The display of LCD is still a program mode.	Press the [PROG] switch. The timer program mode is finished.
	The receiver board is disconnected.	Check that the receiver board is connected to J507 connector on the control board (CKK-535).
	JAX-9B is set to the external receiver mode.	Confirm the receiver connection mode by indication on the LCD.
	The JP1 on receiver board is short-circuited.	Open the JP1 on receiver board.
Printing becomes blurred or falls out.	The thermal head is not cleaned.	Clean the thermal head.
No printing (print out the white paper)	The thermal head is disconnected.	Check that the thermal head is connected to J504 connector on the control board (CKK-535). Check that the cable of thermal head is connected to connector of thermal head.
	The thermal head is a malfunction.	Replace the thermal head.
No paper feed (Paper is not outputted.)	The motor is disconnected.	Check that the motor is connected to J503 connector on the control board (CKK-535).
	The motor is a malfunction.	Replace the motor.
	The hexagon socket set screw for fixing the spur gear (MTG300516) is loosening.	Tighten the hexagon socket set screw for fixing the spur gear (MTG300516).

4. Troubleshooting

JAX-9B W-FAX Service Manual

Failure	Cause	Countermeasure
Monitor OFF (No receiving sound)	The volume of speaker is set to minimum.	Rotate the speaker volume dial to the right side.
	The speaker is disconnected.	Check that the speaker is connected to J501 connector on the control board (CKK-535).
	The receiver board is disconnected.	Check that the receiver board is connected to J507 connector on the control board (CKK-535).
	JAX-9B is set to the external receiver mode.	Confirm the receiver connection mode by indication on the LCD.
Not control the adjustment of inclined image	The SYNC control dial is disconnected.	Check that the SYNC control dial is connected to J501 connector on the control board (CKK-535).
The timer program receiving does not start.	"Clock Error!!" is displayed when JAX-9B is powered on.	Set the correct time. Replace the backup battery.
	The internal clock is set an incorrect time.	Set the correct time.
	The POWER switch is switched over from OFF to TIMER.	Set the POWER switch to ON before setting it to TIMER.
	The program contents contain any errors.	Check the timer program list by printing. Correct the program.
	The receiving start time is overlapped for two or more programs.	Check the "ERROR" message in the printed timer program list. Correct the program with "NG" message
The [MANU] switch is not accepted.	The register operation of a timer program has not been completed. The display of LCD is still a program mode.	Press the [PROG] switch. The timer program mode is finished.
The [FEED] switch is not accepted.	The register operation of a timer program has not been completed. The display of LCD is still a program mode.	Press the [PROG] switch. The timer program mode is finished.
The [CLOCK] switch is not accepted.	The register operation of a timer program has not been completed. The display of LCD is still a program mode.	Press the [PROG] switch. The timer program mode is finished.
The [PROG] switch is not accepted.	Time is indicated on the LCD.	Press the [CLK] switch. The timer mode is finished.

Failure	Cause	Countermeasure
No operating (Power on)	Electric wiring of a power source is wrong.	Check the wiring of terminal for inputting a power source.
	Input voltage is an over range.	Check the input voltage.
	A Fuse has blown.	Replace the FUSE.
	The input over-voltage protection circuit worked.	Turn off a breaker in a switchboard to stop a power source of JAX-9B. Turn on the breaker in the switchboard for operating JAX-9B.
	The control board is not connected to the power supply board.	Check that the cable from the power supply board is connected to J510 connector on the control board (CKK-535). Check that the cable from the control board is connected to CN1 connector on the power supply board.
All switches on panel are not accepted.	The switch board is disconnected.	Check that the switch board is connected to J509 connector on the control board (CKK-535).
Some switch on panel is not accepted.	It may mean an operating specification.	Refer to the inspection manual.
	The switch board is a malfunction.	Replace the switch board.
Updating the program of JAX-9B is a failure.	The DIP-SW is not set to the update mode.	Set the SW8 of DIP-SW to ON.
	The using COM port number of PC is unmatched to the selecting COM port number of update software.	PC and update software need to use the same COM port number.
FAX images are not displayed on the screen of PC.	Electric wiring between JAX-9B and converter is wrong.	Check the wiring to the terminal of JAX-9B. Check the wiring to the terminal of converter.
	The switch of converter has not been set to the instructed mode.	Set the switch of converter as follows; SW1: OFF, SW2: ON

4. Troubleshooting

JAX-9B W-FAX Service Manual

4.2. Recording test

By recording a test pattern, the recording by a thermal head and the drive of a motor can be checked.

1) Starting the recording test

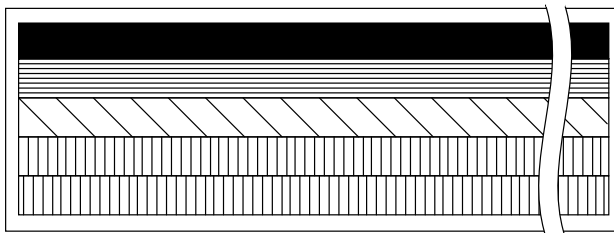
Turn on JAX-9B, pushing the [DIM] switch.

The recording test is started.

2) Recording test

Check the test pattern which is printed out from JAX-9B.

- Falling out of printing
- Blurry printing
- Shrinkage of printing (Shortage of torque of a motor)



3) Stopping the recording test

The message which means selecting the re-test or finish appears.

Press the [3] switch, if the recording test is finished.

4.3. Panel test

The operating of each switch on the panel can be checked.

1) Starting the panel test

Turn on JAX-9B, pushing the [#] switch.

The panel test is started.

2) Panel test

Press the some switch.

- JAX-9B makes a sound and changes a brightness of the panel when JAX-9B accepts a switch.
- The name of switch is indicated on the LCD when JAX-9B accepts a switch.

3) Stopping the panel test

Turn off JAX-9B, and turn on JAX-9B.

4.4. Initializing the memory

The "frequency channels" and "the timer programs" which are registered into the memory of JAX-9B can be cleared. JAX-9B returns to an initial condition.

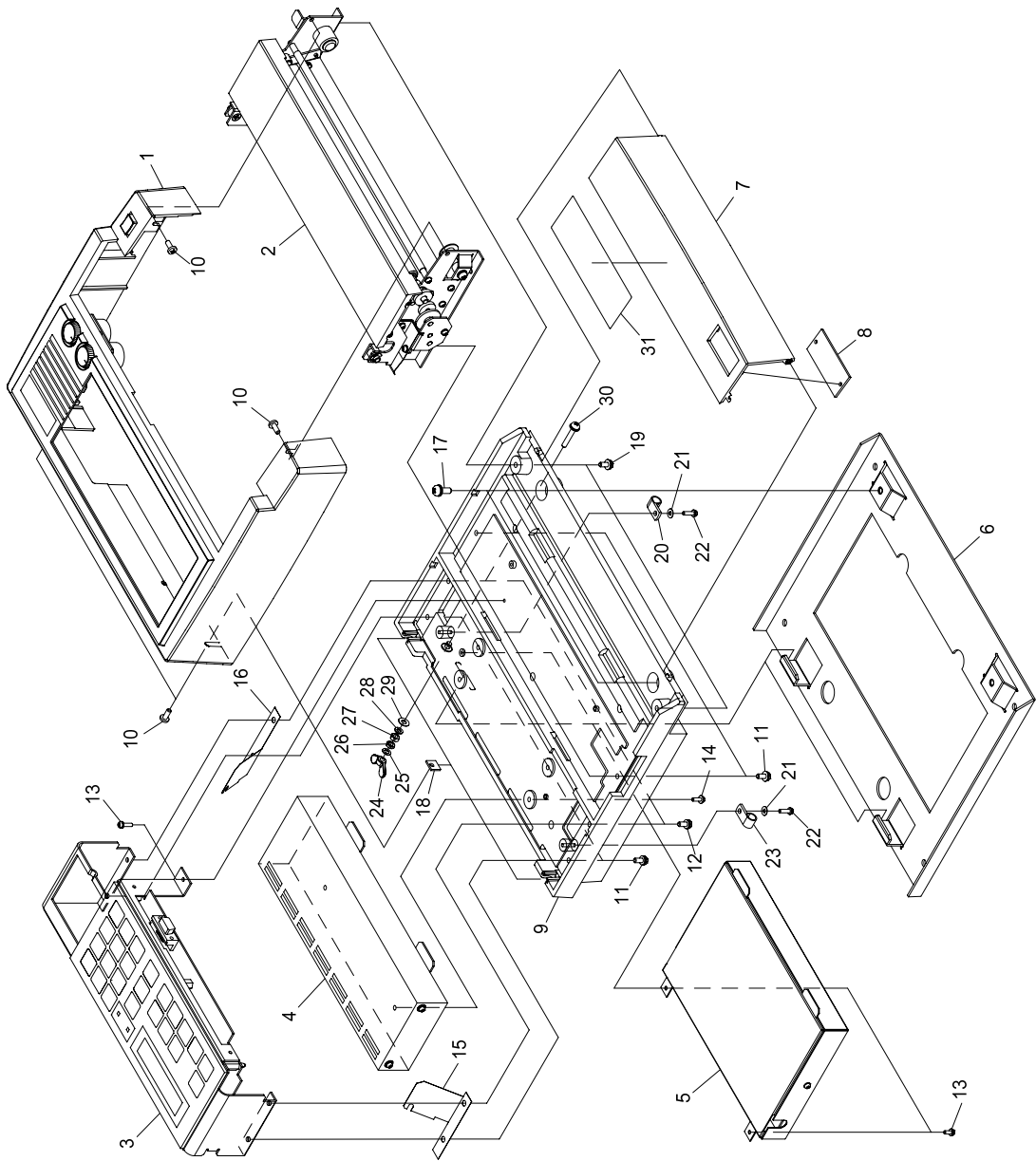
1) Starting the initializing

Turn on JAX-9B, pushing the [CLR] switch.

"Setup All Clear? YES→[1] No→[3]" appears on the LCD.

Press the [3] switch, if initializing the memory is completed.

5. Assembly drawing

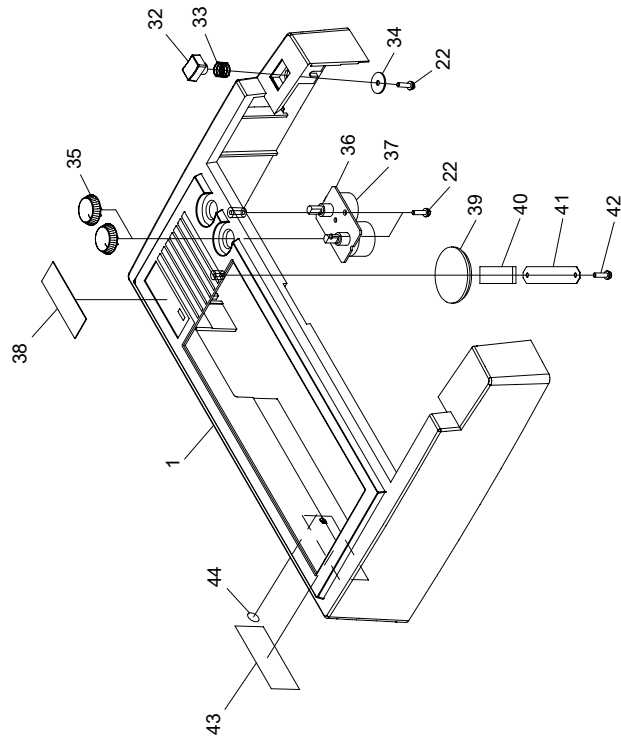


No.	NAME	CODE
1	COVER	Figure 5-2
2	MECHANISM PART	Figure 5-3
3	OPERATION PART	Figure 5-4
4	POWER SUPPLY	-
5	RECEIVING PART	Figure 5-5
6	BASE	MPBP31554
7	FRONT COVER	MTV304481
8	WINDOW	MTV312680
9	CHASSIS	MTV304480
10	SCREW	BRTG09389
11	SCREW	BSNB04012B
12	SCREW	BSNBA4012B
13	SCREW	BRTG09383
14	SCREW	BSNB03010B
15	EARTH PLATE	MTB390835
16	EARTH PLATE	MTB390836
17	SCREW	BSNB05014R
18	METAL FITTING	MTB390821
19	SCREW	BSNC04012B
20	NYLON CLIP	BRBP00007
21	W3	BSFW03000R
22	SCREW	BRTG08577
23	NYLON CLIP	BRBP00005
24	BN4	BSBN04000B
25	LW4Bs	BSLW04000B
26	LN4Bs	BSLN04000W
27	N4Bs	BSHN04000W
28	SW4	BSSW04000S
29	W4Bs	BSFW04000B
30	SCREW	BSNK04025B
31	CAUTION LABEL	MPNN45047

Figure 5-1 Overall

5. Assembly Drawing

JAX-9B W-FAX Service Manual



No.	NAME	CODE
1	COVER	MTV304481A
32	BUTTON	MTV304484
33	COIL SPRING	MPSR30634
34	WASHER	MTV390820
35	PINCH	MTV304483
36	METAL FITTING	MTB390819
37	VOLUME	—
38	LABEL	MPNM35737
39	SPEAKER	—
40	RUBBER PLATE	MTT312681
41	METAL FITTING	MTB390822
42	SCREW	BRTG09384
43	LABEL	MPNN45041
44	LABEL	MPNN44289

Figure 5-2 Cover

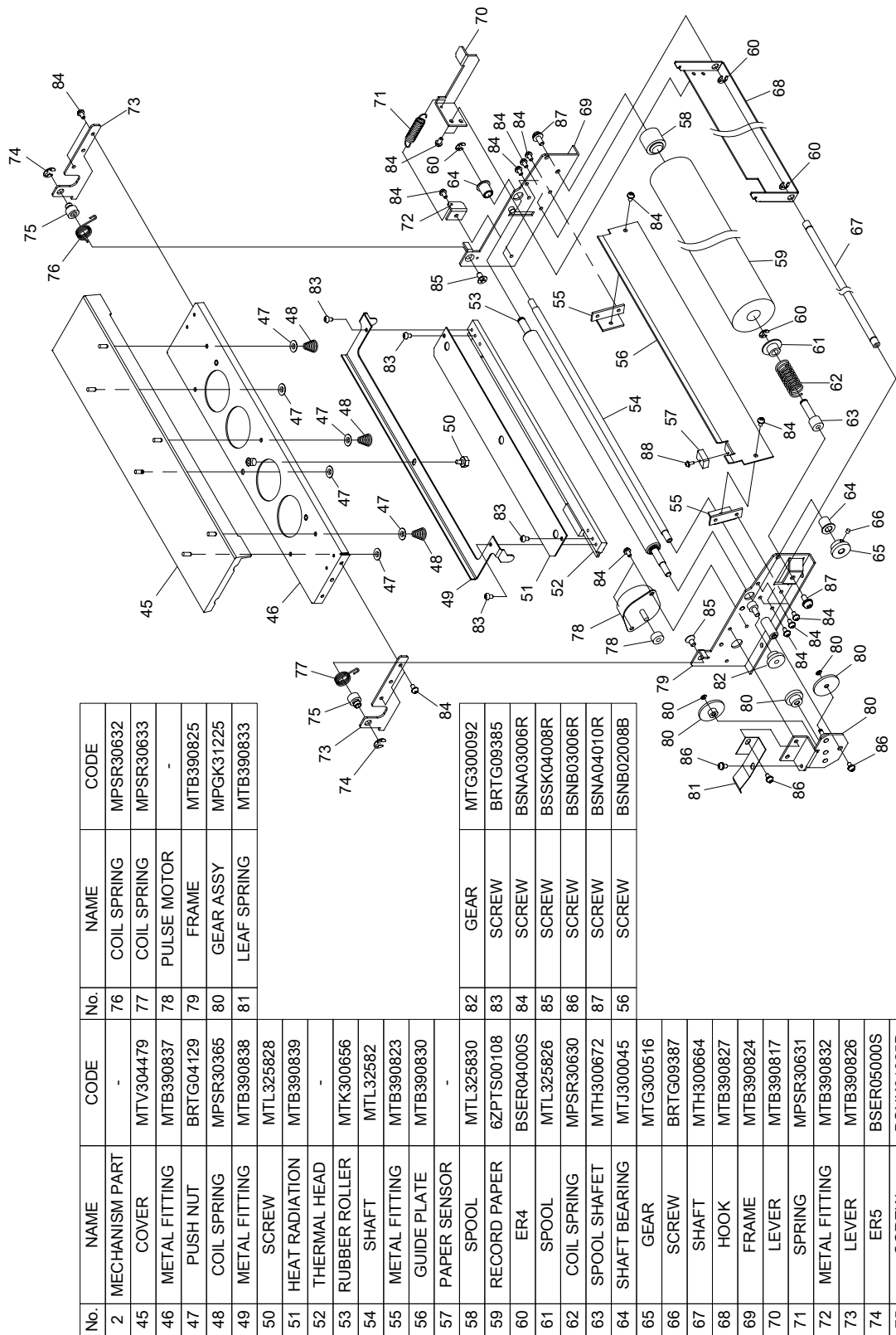
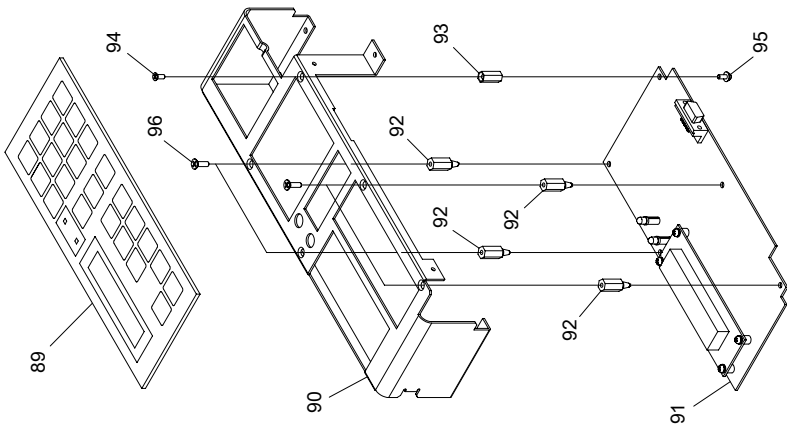


Figure 5-3 Mechanism part

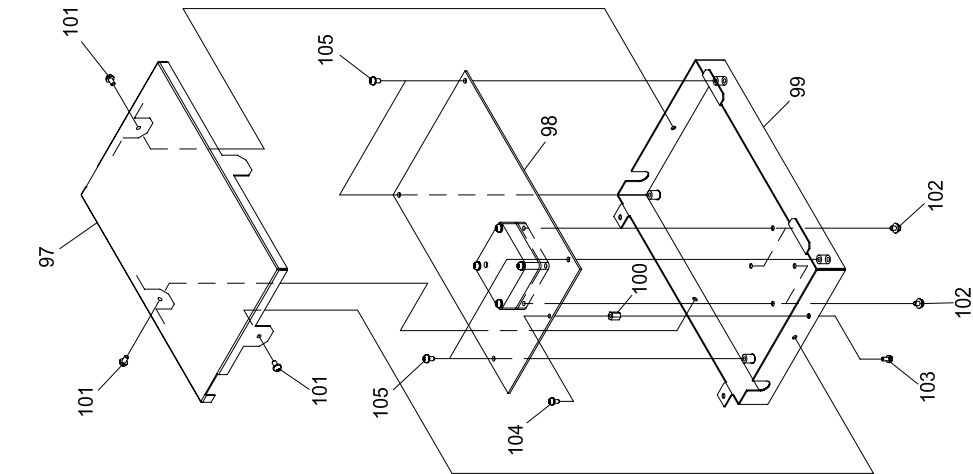
5. Assembly Drawing

JAX-9B W-FAX Service Manual



No.	NAME	CODE
3	OPERATION PART	-
89	SWITCH PANEL	-
90	METAL FITTING	MTB390834
91	PCB	-
92	SPACER	BRTG03825
93	SPACER	MTL325829
94	S3X8	BSSK03008R
95	SCREW	BSNB03006B
96	SCREW	BRTG09386

Figure 5-4 Operation part



No.	NAME	CODE
5	RECEIVING PART	-
97	COVER	MTB389565
98	PCB	-
99	METAL FITTING	MPBC42901
100	SPACER	BRBP07028
101	SCREW	BSNA03006B
102	SCREW	BRTG0016K
103	SCREW	BSNA02605R
104	SCREW	BSNC02606R
105	SCREW	BSNC03006B

Figure 5-5 Receiving part

5. Assembly Drawing

JAX-9B W-FAX Service Manual

アスベストは使用していません
Not use the asbestos

CODE No.7ZPNA4098

For further information, contact:



Since 1915

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